FINAL

ENVIRONMENTAL ASSESSMENT PROPOSED CHAMBERLIN HOTEL REHABILITATION PROJECT AT FORT MONROE, VIRGINIA

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Cover Sheet

ENVIRONMENTAL ASSESSMENT OF PROPOSED CHAMBERLIN HOTEL REHABILITATION PROJECT FORT MONROE, VIRGINIA

Lead Agency: Department of the Army

Proposed Action: Hotel rehabilitation and new facility

Written comments and inquiries regarding this document should be directed to: Mr. Bob Lippard, Drucker and Falk, LLC, Commercial Division, 7200 Stonehenge Drive, Suite 211 Raleigh, North Carolina 27613, (919) 345-7270, and Ms. Jennifer Guerrero, Directorate of Public Works and Logistics (DPW/L), Environmental Division, 318 Cornog Lane, Fort Monroe, Virginia 23651-1110, (757) 788-5363.

Report Designation: Environmental Assessment

Abstract: Drucker and Falk, LLC proposes to rehabilitate the Chamberlin Hotel and construct a new adjacent facility at Fort Monroe using private monies and tax credits provided by the Commonwealth of Virginia and the federal government, through the National Park Service. To receive the tax credits, the project must be certified as being in accordance with the Secretary of the Interiors Standards for Rehabilitation by the Virginia Department of Historic Resources, thus ensuring no adverse effect. Two alternatives were considered, the proposed action and the no action. The proposed action alternative would include converting the hotel into a military retirement community, which will be marketed to retired officers. It would also include the construction of an assisted living facility and parking deck. The 40 to 60 unit assisted living facility would be located on the top level of the parking deck. Under the no action alternative, the proposed rehabilitation to the Chamberlin Hotel, and the construction of a new facility and parking deck would not be implemented.

This Environmental Assessment analyzes the potential effects resulting from implementation of both the proposed action, and the no action alternative upon the natural and human environment. The potential environmental effects from implementation of the proposed action are those that would be associated with short-term renovation, construction, and grading activities. Resources evaluated include air quality, noise, water resources, ecological resources, physical resources, land use, socioeconomic resources, environmental justice, cultural resources, hazardous materials and waste management, and safety and occupational health. Direct and indirect effects were assessed for each environmental resource or issue, considering short-term and long-term project effects and cumulative impacts. Although renovation and construction activities would affect the natural and human environment, most impacts would be temporary in nature with insignificant permanent impacts.

FINDING OF NO SIGNIFICANT IMPACT ENVIRONMENTAL ASSESSMENT OF PROPOSED CHAMBERLIN HOTEL REHABILITATION PROJECT AT FORT MONROE, VIRGINIA

Introduction

This Finding of No Significant Impact (FONSI) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 United States Code (USC) 4231 et seq. as amended in 1975; Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) § 1500-1508; and the Army's implementing regulations, found at 32 Code of Federal Regulations (CFR) 651, *Environmental Analysis of Army Actions*, 29 March 2002. The decision in this FONSI is based upon information contained in the Environmental Assessment (EA) of the Proposed Chamberlin Rehabilitation Project at Fort Monroe. The EA analyzed potential environmental consequences from implementation of both the proposed action and no action alternative.

The purpose of the proposed action is to rehabilitate and modify the Chamberlin Hotel to develop a military retirement community, assisted living facility, and additional parking space. This would require extensive interior renovations, and minor exterior renovations. The proposed assisted living facility and structured parking deck would be new construction connected to the existing hotel. The existing parking area is in disrepair and marginally usable. These actions would allow a vacant deteriorating structure to both be preserved and returned to a dynamic and viable use. The hotel is listed on the National Register of Historic Places as a contributing element of Fort Monroe, which is a Historic Landmark; the hotel is also listed in the Virginia Landmarks Registry. This action is needed to preserve the historic structure, prevent demolition by neglect and the creation of a dangerous and attractive nuisance, and provide a much-needed military retirement community in the area.

Description of Proposed Action and Alternatives

The alternatives that have been analyzed to accomplish the proposed action include the preferred alternative and the no action alternative. To be considered a viable alternative, the proposed Chamberlin Hotel Rehabilitation Project would need to be a negligible

security risk, provide a safe and secure structure, comply with Fort Monroe's Real Property Master Plan 2002 and design standards, and prove to be environmentally sound, avoiding or minimizing impacts to human and natural resources. The no action alternative is carried forward for analysis in accordance with NEPA 1502.14 (d).

The proposed action includes renovation of the Chamberlin Hotel to convert it to independent living apartments, available on a rental basis. It would have approximately 160 units ranging in size from 800 to 1,500 sq. ft. The majority of the units would have two or three bedrooms with two baths; other units would have one bedroom and one bath. The existing kitchen and banquet area would be transformed into an entry area and dining facility for the retirement community. The main lobby area of the existing hotel would be used as "common spaces" for the community residents. It would remain largely as it is at present, only significantly refinished. At the eastern end of the top parking deck, a 35,000 to 50,000 sq. ft. assisted living facility, with up to 60 units, would be constructed. The assisted living facility would have two unit sizes, the majority would be 360 to 400 sq. ft., and the other units would be 500 to 600 sq. ft. The existing 165 space parking area that is in disrepair would become a parking deck, with a capacity of 300 to 350 parking spaces. A new landscape design would be part of this project, which would use as many salt tolerant, native species as possible, as the area is subject to high winds and salt spray.

If the proposed action is not implemented the hotel would remain in its existing state, continuing to deteriorate, with a marginally usable parking lot. This would result in "demolition by neglect," creating a "dangerous and attractive nuisance." This is of concern to Fort Monroe. The CEQ regulations stipulate that the no action alternative must be included as an alternative in order to assess any environmental consequences that may occur if the proposed action is not implemented. Therefore, the no action alternative is carried forward for analysis in the EA.

Decision

Based on the review of the EA, we have decided to proceed with the Chamberlin Rehabilitation Project. The potential impacts to the human and natural environment were evaluated relative to the existing environment. For each environmental resource or issue,

anticipated direct and indirect effects were assessed, considering both short- and long-term project effects. Although implementation of the proposed action would affect the human and natural environment, only minor impacts would be expected. The proposed action would have temporary, minor and site-specific impacts on air quality and noise. The proposed action would result in soil disturbance during construction and grading activities, however, best management practices (BMPs) would be implemented during construction and grading to minimize impacts. The proposed action would have no adverse impacts on water resources or natural plant communities. There are no anticipated impacts to known or suspected archeological resources, however, there is a remote possibility that future research may discover unexpected, especially deeply buried finds. The area in question has been filled and burned, which significantly reduces the potential for significant archaeological deposits. The renovation of the Chamberlin Hotel would impact the architectural resource, but not adversely, as the work would proceed in strict accordance with the Secretary of the Interiors Standards for Rehabilitation. Under the proposed action, the rehabilitation to the Chamberlin and the new facility and parking deck would not have a significant impact on hazardous materials and waste use, storage, or generation at Fort Monroe. Conversely, these activities would produce a strong positive benefit, improving land use, and changing it from a seasonal recreational use to a continuous residential use. This project will also provide a strong positive benefit to socioeconomic resources and military retirees, boosting the local economy. Health and safety would not be impacted, as safety plans will be adhered to during construction activities. Overall, the analysis for this EA indicates that the proposed action for the rehabilitation project would not result in, or contribute to, significant negative cumulative impacts to the resources in the region.

Conclusion

In accordance with the CEQ regulations implementing NEPA and the *Environmental Analysis of Army Actions*, we conclude that the proposed action will have no significant impact on the quality of the human environment and that the preparation of an environmental impact statement is not warranted.

Approved:_____ Date:_____

Bob Lippard, President, Drucker & Falk, LLC

Development Coordinator

Approved:_____ Date:_____

Perry Allmendinger, Colonel,U.S. Army
Garrison Commander

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ACRONYMS AND ABBREVIATIONS

AR	Army Regulation
CAA	Clean Air Act
CBPA	Chesapeake Bay Preservation Area
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DPW/L	Directorate of Public Works/Logistics
EA	Environmental Assessment
EO	Executive Order
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
HAP	Hazardous Air Pollutant
ICRMP	Integrated Cultural Resources Management Plan
INRMP	Integrated Natural Resources Management Plan
MACT	Maximum Achievable Control Technology
MP	Military Police
NESHAP	National Emission Standards for Hazardous Air Pollutants
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
RCRA	Resource Conservation and Recovery Act
RMA	Resource Management Area
ROI	Region of Influence
RONA	Record of Non-Applicability
RPA	Resource Protection Area
SIP	State Implementation Plan
TRADOC	U.S. Army Training and Doctrine Command
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
VCRMP	Virginia Coastal Resources Management Program
VDEQ	Virginia Department of Environmental Quality
VDHR	Virginia Department of Historic Resources
VTC	Video Teleconferencing Center

1.0 PURPOSE AND NEED FOR ACTION

1.1 Introduction

Drucker and Falk, LLC proposes to purchase the Chamberlin Hotel from Pelican Corporation and convert it into a military retirement community for officers. The hotel is privately owned but located on government property at Ft. Monroe, Virginia, an active Army Post. The conversion would include the new construction of a parking deck, on the top level of which, a 40 to 60 unit assisted living facility would be constructed. The 4.97 acres of land the hotel and parking lot are located on, would be leased by Drucker and Falk, LLC from the U.S. Government.

In order for the hotel to be re-used as an independent living apartments for the retirement community, the interior of the hotel would be extensively remodeled, while only minor changes would be made to the exterior facade of the building. This Environmental Assessment (EA) presents an analysis of potential impacts that would result from implementation of the proposed action and the alternatives.

1.2 Location of the Proposed Action

The Chamberlin Hotel and the property to be leased for the rehabilitation project are located at Fort Monroe, Virginia. The site is bound by Fenwick Road on the north, Ingalls Road on the east, and the Hampton Roads harbor on the south and west. It has an indoor pool, outdoor tennis court and outdoor pool. The hotel incorporates Neo-Georgian architectural themes, has 280 rooms, with brick exterior and was built in 1928. It is a nine-story structure with 212,000 sq. ft. and a basement.

Fort Monroe is an active military installation and encompasses 568 acres of which approximately 108 acres are under water. It is located at the southeastern tip of the Virginia peninsula on a sand spit between Hampton Roads and the Chesapeake Bay, within the City of Hampton. The City of Hampton is immediately west of Fort Monroe, and the Cities of Newport News, Norfolk and Portsmouth are nearby (Figure 1-1). The

Hampton Roads is immediately to the south, southwest, and Willoughby spit is to the south, southeast. The surrounding land use is predominantly residential and administrative. Construction of the fort began in 1819. The fort was officially designated as Fort Monroe in 1832. Today the installation is the headquarters of the U.S. Army Training and Doctrine Command (TRADOC), the Northeast Regional Office (NERO) of the Installation Management Agency (IMA), and the Accessions Command, as well as has other tenants. The current mission is to provide quality base operations support to Department of Defense personnel and activities through facilities, infrastructure, well-being support and force protection.

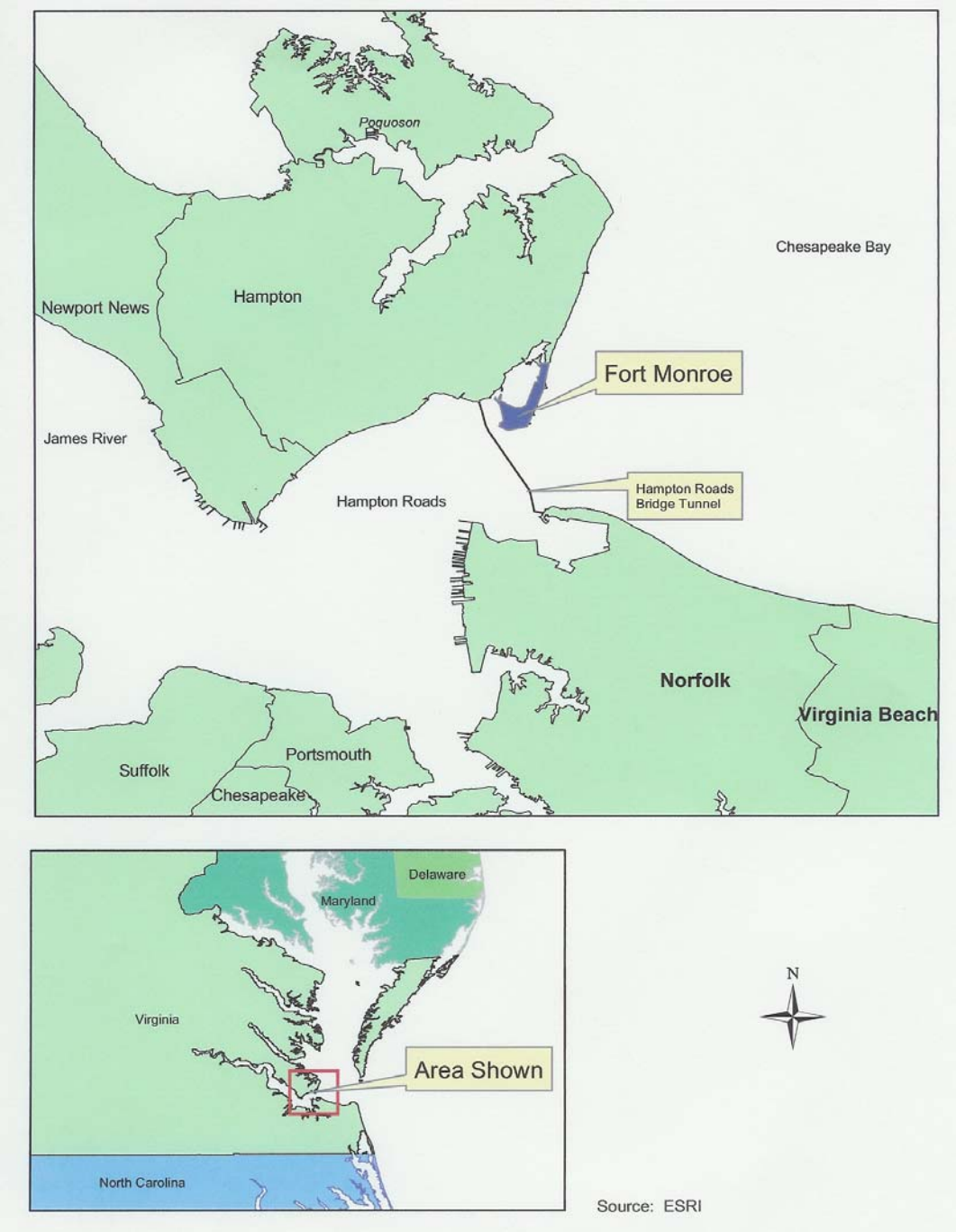

Figure 1-1. Fort Monroe and Vicinity

1.3 Purpose and Need

The purpose of the proposed action is to rehabilitate and modify the Chamberlin Hotel to develop a military retirement community, assisted living facility, and additional parking space. This would require extensive interior renovations, and minor exterior renovations.

The proposed assisted living facility and structured parking deck would be new construction connected to the existing hotel. The existing parking area is in disrepair and only marginally usable. These actions will allow a vacant deteriorating structure to both be preserved and returned to a dynamic and viable use. The hotel is listed on the National Register of Historic Places as a contributing element of Fort Monroe, which is a National Historic Landmark; the hotel is also listed in the Virginia Landmarks Registry.

This action is needed to preserve the historic structure, prevent demolition by neglect and the creation of a dangerous and attractive nuisance, and provide a military retirement community in the area. Fort Monroe, the City of Hampton, and the Virginia Department of Historic Resources would like to have the hotel preserved and revitalized. However, the Army has previously evaluated potential uses of the hotel for its own purposes and ruled out any such possibilities, while the Commonwealth of Virginia cannot fund this restoration project, since this structure is not owned by the Commonwealth. Therefore, a private investor is the only option for the re-use of the hotel. Prior to the Pelican Properties purchase of the hotel, it was owned by another private entity, and was also a hotel. It too had many of the same problems as the present owners have, deteriorating conditions, and lack of business.

The current owners of the Chamberlin Hotel closed it in June of 2003, after experiencing long-term financial problems, which were allegedly worsened in the aftermath of the September 11, 2001 terrorist attacks. Fort Monroe was temporarily closed off to the public, as a security measure essentially closing down the hotel's operations for several days. After reopening subsequent to 9-11, broken boilers again caused the hotel to close in April 2003. Pelican Properties, the owner of the hotel, closed the property at that point and initiated bankruptcy proceedings. The hotel was put up for sale in May of 2003. Drucker and Falk, LLC put the property under contract in the fall of 2003 and intends to close on it in the fall of 2004.

The proposed military retirement community and assisted living facility with an expanded parking area would revitalize the property. It would resolve the potential access problem associated with other uses of the hotel, as military retirees are a low

security risk, and so have approved access to the Fort Monroe. The proposed project would provide military retirees in the community the ideal location.

This proposed project will provide much needed housing for retired military officers, to include assisted living, while also providing needed parking spaces for the military. The military's parking spaces would be leased from the retirement community. This rehabilitation project would allow a failing historic building to be rejuvenated and given a viable use. The project would boost the local economy through the creation of new jobs in the retirement community, and prevent valued aging citizens from moving to other locales to find a retirement community. The 44 million dollar construction budget would add jobs in the construction industry and positively affect local residents' purchasing power in the area.

1.4 Scope of Analysis

The EA identifies and analyzes the retirement community use and its potential effects on the natural and human environment in sufficient detail to determine the significance of impacts on the affected environment. The proposed Chamberlin Rehabilitation Project would be conducted within the boundaries of Fort Monroe, and on the property of the existing hotel land lease, only. The potential environmental effects of the proposed action are those that would be associated with the hotel's remodeling, new construction of the parking deck and assisted living facility, and land clearing and grading. Drucker and Falk, LLC and the Garrison Commander at Fort Monroe would be responsible for deciding whether to implement the proposed action, or the no action alternative. The decision would be based on the findings contained in this EA and the consideration of public comments and agency recommendations.

1.5 Applicable Regulatory Compliance and Required Coordination

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA), Public Law 91-190, 42 U.S. Code 4321 et seq., and the implementing regulations established by the Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) 1500-1508. The intent of NEPA is to protect, restore, and enhance the environment through well-informed federal decisions. This EA has also

been prepared in accordance with the Army's implementing regulations, found at 32 Code of Federal Regulations (CFR) 651, *Environmental Analysis of Army Actions*, 29 March 2002. This EA also complies with potential requirements of additional state and federal environmental regulations including the following:

- Clean Water Act (CWA)
- Clean Air Act (CAA)
- National Historic Preservation Act (NHPA)
- Resource Conservation and Recovery Act (RCRA)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Virginia Coastal Zone Management Program
- Chesapeake Bay Preservation Act (CBPA)
- Endangered Species Act (ESA)
- Code of Virginia

NEPA and CEQ regulations require coordination with relevant federal, state, and local agencies to evaluate the potential environmental impacts associated with the proposed action. State regulatory coordination would be completed with the Virginia Department of Environmental Quality (VDEQ).

Federal agencies are required to determine the conformity of proposed actions with respect to State Implementation Plans (SIPs) for attainment of air quality goals. Under the CAA Amendments of 1990, the U.S. Environmental Protection Agency (USEPA) requires an analysis of air emissions to determine if the proposed action conforms to the SIP.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVE

2.1 Introduction

This section describes the alternatives that have been analyzed to accomplish the proposed action or the no action alternative. To be considered a viable alternative, the proposed Chamberlin Hotel Rehabilitation Project would need to be certified as meeting the Secretary of the Interior's Standards for Rehabilitation by the Virginia Department of Historic Resources and be approved by Fort Monroe Directorate of Public Works and Logistics, and the Garrison Commander of Fort Monroe. The no action alternative is carried forward for analysis in accordance with NEPA 1502.14 (d).

2.2 Selection Criteria for Alternatives

Viable alternatives for the Chamberlin Rehabilitation Project at Fort Monroe should accomplish the following:

- Negligible security risk at the Fort Monroe;
- Provide a safe and secure structure;
- Comply with Fort Monroe's Real Property Master Plan 2002 and design standards, and the Secretary of the Interior's *Standards for Rehabilitation*; and
- Prove to be environmentally sound, avoiding or minimizing impacts to human and natural resources.

2.3 Proposed Action Alternative

The proposed action includes renovation of the Chamberlin Hotel to convert it to a military retirement community, with an assisted living facility and parking deck. This would require extensive interior renovations, with minor exterior renovations of the hotel and the addition of an attached parking structure, which would be used as the platform for the assisted living facility. The existing parking lot would be renovated for these purposes (Figure 2-1).

The Chamberlin Hotel itself would be converted to independent living apartments, available on a rental basis. It would have approximately 160 units ranging in size from

800 to 1,500 sq. ft. The majority of the units would have two bedrooms and two baths; other units would have one bedroom and one bath. The existing kitchen and banquet area would be transformed into an entry area and dining facility for the retirement community. The main lobby area of the existing hotel would be used as "common spaces" for the community residents. It would remain largely as it is at present, only significantly rehabilitated.

On top of the parking deck, at the eastern end, a 35,000 to 50,000 sq. ft. assisted living facility, with approximately 60 units, would be constructed. The assisted living facility would have two unit sizes, the majority would be 360 to 400 sq. ft. (approximately 42units) and the other units would be 500 to 600 sq. ft. (approximately 18 units). Architecturally, this new assisted living building will be compatible with the existing adjacent, historic structures in size, scale, massing, materials and detailing. The new assisted living building will have brick cladding on all exposed facades matching the brick on the new parking deck and compatible with the existing, adjacent building's brick color.

The existing 165 space parking area, would become a parking deck, with a capacity of 350 parking spaces. The parking deck would have two levels above grade, and one at grade, and would be open on all sides. It would have brick cladding on all exposed facades. This would be compatible with the existing adjacent building's brick color. A new landscape design would be part of this project, incorporating salt tolerant, native species, as the area is subject to high winds and salt spray.

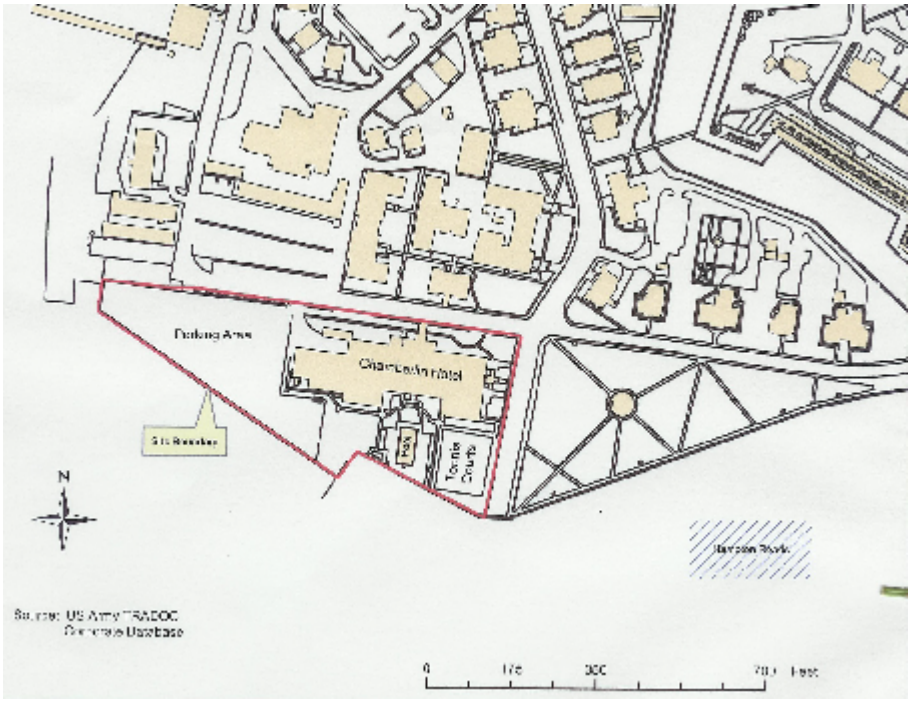

Figure 2-1. Location of Proposed Chamberlin Rehabilitation Project

2.4 No Action Alternative

The no action alternative would result in the hotel remaining in its existing state, continuing to deteriorate, with a marginally usable parking lot. This would result in "demolition by neglect," creating a "dangerous and attractive nuisance." This is a concern of Fort Monroe. The CEQ regulations stipulate that the no action alternative must be included as an alternative in order to assess any environmental consequences that may occur if the proposed action is not implemented. Therefore, the no action alternative is carried forward for analysis in the EA.

2.5 Alternatives Considered but Eliminated form Further Consideration

A comparison of alternatives is presented in Table 2-1. The no action alternative represents the baseline from which environmental effects may be measured. The potential short-term and long- term impacts from implementation of the proposed action would be considered.

An additional alternative considered early in the planning process was rehabilitation of the existing hotel, without the addition of an adjacent assisted living facility and parking

lot. This alternative was considered infeasible by the developer, and was rejected early in the discussion. The developer considered the existing parking already inadequate and realized the need for the assisted living facility. The assisted living facility is necessary to ease end of life transitions for the residents.

The second additional alternative that was discussed early in the planning process was considered minor in nature and was dismissed as a result of consultation with the Virginia Department of Historic Resources (VDHR). This alternative was identical to the action alternative in scope, purpose and need, and differed only in that the architecture of the new adjacent structure was considered too similar to the historic Chamberlin Hotel. VDHR requires that the new facility be obviously distinguishable in architectural design from the Chamberlin. Therefore, this alternative was also eliminated from further analysis in the EA.

2.6 Comparison of Environmental Consequences

Table 2-1 summarizes the potential impacts of implementing the proposed action or taking no action. The potential short-term and long-term impacts were considered in the comparison of alternatives.

Table 2-1. Comparison of Alternatives

Resource/Issue	Alternative 1 Proposed Action	Alternative 2 No Action
Air Quality	Potential short-term impacts from emissions due to construction activities	No change
Noise	Potential short-term impacts from construction activities	No change
Geology and Soils	Short-term negative effects from construction and installation; minimized by erosion and sediment controls	Negative effect, continued erosion from dilapidated parking lot
Water Resources	Negligible effect on surface water, groundwater, or floodplains	No change
Biological Resources	Potential short-term impacts on vegetation due to construction activities; no effect on wildlife or wetlands	No change
Hazardous Materials and Waste Management	No change	No change
Land Use	Strong positive benefit, improvements to land use, change in land use	No change
Socioeconomic Resources	Strong positive benefit to military retirees, possible boost to the local economy	No change
Environmental Justice	No change	No change
Cultural Resources	Strong positive benefit to the historic Chamberlin Hotel	Negative effect, continued dilapidation of historic resource
Safety and Occupational Health	Potential short-term impacts from construction activities	Negative effect, becomes an attractive nuisance, which would be a safety concern if entered

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

This section describes the relevant environmental conditions at Fort Monroe for resources potentially affected by implementation of the proposed action, and the no action alternative. The region of influence, or the expected geographic scope of potential impacts, include the site itself and the immediate, adjacent properties at Fort Monroe (see Figure 2-1). In compliance with guidelines contained in NEPA, CEQ regulations, and Army's implementing regulations, found at 32 Code of Federal Regulations (CFR) 651, *Environmental Analysis of Army Actions*, 29 March 2002, and Executive Order (EO) 13045 Protection of Children from Environmental Health Risks and Safety Risks, the description of the affected environment focuses on those resources potentially subject to impacts.

3.2 Air Quality

3.2.1 The National Ambient Air-quality Standards

The Clean Air Act (42 USC 7401-7671q), as amended, provides the framework for federal, state, tribal, and local rules and regulations to protect air quality. The CAA gives the USEPA the responsibility to establish the primary and secondary National Ambient Air-quality Standards (NAAQS) (40 CFR §50) that set safe concentration levels for six criteria pollutants: particulate matter measuring less than 10 microns in diameter (PM_{10}), sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen oxides (NO_X), ozone (O_3), and lead (Pb). Primary NAAQS are established to protect public health, and secondary standards provide protection for the public welfare, which includes wildlife, climate, transportation, and economic values (Table 3-1). Additionally, the USEPA also has responsibility for ensuring that air-quality standards are met to control pollutant emissions from mobile (i.e., vehicles) and stationary (i.e., factories) sources.

Table 3-1. National Ambient Air-Quality Standards

Air Pollutant	Averaging Time	NAAQS	
		Primary[1]	Secondary[2]
CO	1-hour 8-hour	35 ppm 9 ppm	35 ppm 9 ppm
NO_X	Annual	0.053 ppm	0.053 ppm
SO_2	3-hour 24-hour Annual	- 0.14 ppm 0.03 ppm	0.50 ppm - -
PM_{10}	24-hour Annual	150 µg/m^3 50 µg/m^3	150 µg/m^3 50 µg/m^3
O_3	1-hour[3] 8-hour	0.12 ppm 0.08 ppm	0.12 ppm 0.08 ppm
Pb	Quarterly average	1.5 µg/m^3	1.5 µg/m^3

[1] Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.
[2] Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings.
[3] The ozone 1-hour standard applies only to designated nonattainment areas.
ppm = parts per million
µg/m^3 = micrograms per cubic meter
Source: USEPA 2002

The NAAQS represent the maximum levels of background pollutants considered safe, with an adequate margin of safety to protect public health and welfare. Short-term standards (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term standards (annual averages) have been established for pollutants contributing to chronic health effects. Each state has the authority to adopt standards stricter than those established under the federal program; however, the Virginia Department of Environmental Quality (VDEQ) accepts the federal standards.

Areas that violate the NAAQS are designated as “nonattainment” areas, and areas that comply with air-quality standards are designated “attainment” areas for the relevant pollutants. “Attainment/maintenance” areas are areas that have previously been designated “nonattainment,” and have subsequently been redesignated to “attainment,” for a probationary period, due to complying with the NAAQS. Attainment/maintenance status is achieved through the development and implementation of maintenance plans for criteria pollutants of interest.

3.2.2 The Conformity Rule and Applicability

The CAA contains the legislation that mandates the general conformity rule to ensure that federal actions in nonattainment and attainment/maintenance areas do not interfere with a state's timely attainment of the NAAQS. The CAA also requires federal agencies to demonstrate that their actions conducted in nonattainment and attainment/maintenance areas conform to the purposes of the State Implementation Plan (SIP). The general conformity rule divides the air conformity process into two distinct areas: applicability analysis and conformity determination. The applicability analysis process requires federal agencies to determine if their proposed action(s) would increase emissions of criteria pollutants above threshold levels (40 CFR §93.153). These threshold rates vary depending on the severity of the nonattainment and geographic location (Tables 3-2 and 3-3). *De minimis* emissions are total direct and indirect emissions of a criteria pollutant caused by a federal action in a nonattainment or attainment/maintenance area in less than these threshold rates**.**

An action is subject to the general conformity rule if the emissions are deemed regionally significant, even if the emissions are *de minimis*. Regionally significant emissions are defined as the total direct and indirect emissions of a federal action for any criteria pollutant that represents 10 percent or more of a nonattainment or attainment/ maintenance area's emission inventory for that pollutant.

Table 3-2. Applicability Thresholds for Criteria Pollutants in Nonattainment Areas

Criteria Pollutants/NAA Status	TPY
O_3 (VOCs or NOx)	
Serious NAAs	50
Severe NAAs	25
Extreme NAAs	10
Other O_3 NAAs outside an O_3 transport region	100
Marginal and moderate NAAs inside an O_3 transport region	50
VOC	100
CO	
All NAAs	100
SO_2 or NO_x	
All NAAs	100
PM_{10}	
Moderate NAAs	100
Serious NAAs	70
Pb	
All NAAs	25

TPY = tons per year
VOC = volatile organic compounds
Source: 40 CFR §93.153

Table 3-3. Applicability Thresholds for Attainment/Maintenance Areas

Criteria Pollutants	TPY
O_3 (NO_x or NO_2)	
All maintenance areas	100
O_3 (VOCs)	
Maintenance areas inside an O_3 transport region	50
Maintenance areas outside an O_3 transport region	100
CO	
All maintenance areas	100
PM_{10}	
All maintenance areas	100
Pb	
All maintenance areas	25

TPY = tons per year
VOC = volatile organic compounds
Source: 40 CFR §93.153

3.2.3 Existing Regional, Local and Base-Wide Air Quality

Air quality at Fort Monroe is administered at the federal level by USEPA Region 3 and at the state level by the Virginia Department of Environmental Quality (VDEQ). Fort Monroe is located within the Hampton Roads Intrastate Air-quality Control Region (AQCR 223). The Hampton Roads Intrastate Air-quality Control Region has been designated by the USEPA as marginal non-attainment for the new 8-hour O_3 standard, effective 15 April 2004. Air-quality data for Virginia are collected by VDEQ at representative site for each region throughout the state. The most recent available data for the Hampton Roads Area (VDEQ, 2002) can be used to roughly describe the ambient air-quality conditions at Fort Monroe (Table 3-4).

Table 3-4. Monitored Ambient Air-Quality Conditions for Areas Surrounding Fort Monroe

Criteria Pollutant	Monitored Data	Primary Standard	Secondary Standard	Monitoring Station Location
CO				
8-Hour Maximum (ppm)	5.1	9	9	Norfolk State
1-Hour Maximum (ppm)	7.1	35	35	University
NO_2				Norfolk State
Annual Arithmetic Mean (ppm)	0.018	0.053	0.053	University
Ozone				Virginia School for
8-Hour Maximum (ppm)	0.117	0.12	0.12	the
1-Hour Maximum (ppm)	0.134	0.08	0.08	Deaf & Blind
$PM_{2.5}$				NOAA Property,
Annual Arithmetic Mean (µg/m3)	12.6	15	15	Oscar Smith Middle
24-Hour Maximum (µg/m3)	49.4	65	65	School Stadium
PM_{10}				
Annual Arithmetic Mean (µg/m3)	17	50	50	Oscar Smith Middle
24-Hour Maximum (µg/m3)	39	150	150	School Stadium
SO_2				
Annual Arithmetic Mean (ppm)	0.006	0.03		Norfolk State
24-Hour Maximum (ppm)	0.041	0.14		University
3-Hour Maximum (ppm)	0.121		0.5	

Source: VDEQ 2002

Fort Monroe limits it emissions to less than 100 tons per year of any single criteria pollutant, therefore it is not considered a Title V "major source". Fort Monroe is currently subject to a synthetic minor stationary source permit to operate (Operating

Permit, AIRS Id. No. 51-650-00052). This permit was most recently reissued on 3 October 2003 (Fort Monroe, 2003). Stationary sources at Fort Monroe include boilers, generators, closed sanitary landfills and above and underground storage tanks (ASTs and USTs). The total stationary source emissions for Fort Monroe and AQCR 223 are tabulated below (Table 3-5).

Table 3-5. Total Stationary Source Emissions for Fort Monroe and AQCR 223

Criteria Pollutants	Fort Monroe Stationary Source Emissions[1] (tpy)	AQCR 223 Total Emissions[2] (tpy)
NO_x	5.06	32758
SO_x	1.79	91581
VOCs	2.16	6571
CO	2.24	32694
PM_{10}	0.34	4143

1 Source: Fort Monroe 2003 Air Emissions Inventory
2 Source: VDEQ 2002
tpy=tons per year

3.3 Noise

Acoustical noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies according to the type and characteristics of the noise sources, distance between source and receiver, receiver sensitivity, and time of day. Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear. The ear senses these vibrations as changes in pressure and as a result, sound levels are most commonly referred to as “sound pressure levels.”

Sound levels are expressed in units of decibels. The term decibel (dB) implies a logarithmic ratio of the measured pressure to a reference pressure. This reference pressure refers to a pressure just barely detectable by the human ear. The human ear responds differently to sounds at different frequencies. This is demonstrated by the fact that we hear higher pitched sounds more easily than lower ones of the same magnitudes. To compensate for the different "loudness" levels as perceived by humans, a standard

weighting curve is applied to measured sound levels. This weighting curve represents the human ear's sensitivity and is labeled "A" weighting. The units of magnitude of the sound level are therefore written as dBA ("A" weighted decibels). All sound levels analyzed in this EA are A-weighted unless otherwise noted.

- **Day-Night Average Sound Level**. In this EA, the day-night average sound level (DNL) is used to describe noise. The DNL is a cumulative metric that accounts for the total sound energy occurring over a 24-hour period, with nighttime noise weighted more heavily to reflect community sensitivity to noise during nighttime hours. Noise levels in excess of DNL 65 dBA are normally unacceptable for noise-sensitive land uses such as residences, schools, and hospitals. Studies of community annoyance to numerous types of environmental noise show that DNL correlates well with percentages of groups of persons highly annoyed.

- **Maximum Sound Level.** The highest A-weighted sound level measured during a single event in which the sound level changes value as time goes on (e.g., an aircraft overflight) is called the maximum A-weighted sound level or maximum sound level.

- **Speech Interference.** Speech interference associated with construction noise is a cause of annoyance to individuals. The disruption of routine activities such as listening or telephone use gives rise to frustration and irritation. The quality of speech communication is also important in classrooms, offices, and industrial settings and can cause fatigue and vocal strain to those who attempt to communicate over the noise.

- **Noise Annoyance.** Noise annoyance is defined by the USEPA (1972) as any negative subjective reaction on the part of an individual or group. As noted in the discussion of DNL above, community annoyance is best measured by that metric. Because the USEPA Levels Document (USEPA 1972) identified DNL 55 dBA as "…requisite to protect public health and welfare with an adequate margin of safety," it is commonly assumed that 55 dBA should be adopted as a criterion for community noise analysis. From a noise exposure perspective, that would be an ideal selection. However, financial and technical resources are generally not

available to achieve that goal. Most agencies have identified DNL 65 dBA as a criterion which protects those most impacted by noise and which can often be achieved on a practical basis (Federal Interagency Committee on Noise [FICON], 1992). Although DNL 65 dBA is widely used as a benchmark for evaluating potential significant noise impact, and is often an acceptable compromise, it is not a statutory limit and it is appropriate to consider other thresholds for particular cases.

- **Hearing Loss.** Noise-induced hearing loss is probably the best defined of the potential effects of human exposure to excessive noise. Federal workplace standards for protection from hearing loss allow a time-average level of 90 dBA over an 8-hour work period, or 85 dBA averaged over a 16-hour period. Even the most protective criterion suggests a time-average sound level of 70 dBA over a 24-hour period (USEPA, 1972). Since it is unlikely that receivers will remain exposed to this level for 24 hours per day for extended periods, there is little possibility of hearing loss below DNL 75 dBA.

3.3.1 Regulatory Requirements

The Noise Control Act of 1972 (PL 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. In 1974, the USEPA provided information on negative effects of noise and identified indoor and outdoor noise limits that protect public health and welfare. In addition, sound quality criteria promulgated by the USEPA and the U.S. Department of Housing and Urban Development have identified noise levels to protect public health and welfare with an adequate margin of safety. These levels are considered acceptable guidelines for assessing noise conditions in an environmental setting. Average acceptable day-night sound pressure levels fall in a range between 50 dBA in quiet suburban areas and 70 dBA in very noisy urban areas (USEPA, 1974). Table 3-6 lists some common sound levels associated with everyday activities and devices.

Table 3-6. Common Sound Levels

Outdoor	dBA	Indoor
Snowmobile	100	Subway Train
Tractor	90	Garbage Disposal
Noisy Restaurant		Blender
Downtown (Large City)	80	Ringing Telephone
Freeway Traffic	70	TV Audio
Power Lawn Mower		
Normal Conversation	60	Sewing Machine
Rainfall	50	Refrigerator
Quiet Residential Area	40	Library

Source: USEPA 1974

3.3.2 Existing Conditions

The expected day-night sound level [DNL] for the proposed project and surrounding locations is approximately 55 dBA (USEPA, 1974). All project areas would fall within this general description given the setting and environment. Noise is probably not considered an adverse aspect of the existing environment. Less than three percent of individuals are annoyed by in situ noise conditions of this level and type (USEPA, 1974). There are no schools, churches, or hospitals adjacent to the proposed project area.


Source: ICRMP, 2003

Fort Monroe is located outside the 65 dBA noise contours for all surrounding airports and military air installations, including, Langley Air Force Base, Naval Air Station Oceana, Naval Auxiliary Landing Field Fentress, Naval Station Norfolk Chambers Field, U.S. Army Transportation Center Fort Eustis, Newport News International Airport and Norfolk International Airport. Aircraft noise does not contribute significantly to the in situ noise environment at Fort Monroe.

3.4 Water Resources

The water resources of a given area include surface water and ground water. Surface water includes areas of open water, such as lakes, ponds, rivers, and streams. Ground water is located in underground aquifers. Floodplains are areas adjacent to surface water that are prone to flooding. The CWA of 1972 is the primary federal law that protects the nation's waters, including lakes, rivers, aquifers, wetlands, and coastal areas. The primary objective of the CWA is to restore and maintain the integrity of the nation's waters.

3.4.1 Surface Water

Surface water resources at Fort Monroe include Mill Creek, the Hampton Roads harbor and the Chesapeake Bay. The western side of Fort Monroe is adjacent to Mill Creek, which drains into the lower Chesapeake Bay. Mill Creek is a tidal estuary that includes approximately 80 acres of salt marsh. The Chamberlin Hotel project area is bounded on the south and west by the Hampton Roads Harbor. A concrete seawall was built in 1934 to prevent shoreline erosion.

3.4.2 Groundwater

Fort Monroe is located in the North Atlantic Coastal Plain aquifer system. The North Atlantic Coastal Plain aquifer is a semi-consolidated sand and gravel aquifer. Groundwater in the coastal plain is found in pores between sediments. It is recharged primarily by infiltration of precipitation and percolation to the water table. Most unconfined groundwater flows short distances to nearby streams, but small amounts flow down to recharge the deeper confined aquifers. Regional aquifers of importance include the Columbia aquifer, which is unconfined in the Atlantic Coastal Plain Province. The Yorktown-Eastover aquifer is confined beneath the Columbia aquifer in the eastern part of the Atlantic Coastal Plain Province (http://va.water.usgs.gov/online_pubs/WRIR/98-4085/g-wfmcpasys_va.html).

Ground water at Fort Monroe is likely to be brackish due to its location. The City of Newport News reservoir system is the potable water source for Fort Monroe. Big Bethel Reservoir was the potable water source until September 2003. Big Bethel reservoir could no longer be used because it was determined that the water treatment plant as currently

configured could not meet current and future drinking water regulations; and did not meet current wastewater discharge regulations. Specifically the total copper concentration in the discharge effluent was not consistently meeting the permit limits (Pinkoski 2004), and the effluent failed numerous toxicity tests.

3.4.3 Floodplains

Floodplains are defined as areas adjoining inland or coastal waters that are prone to flooding. These areas must be reserved to discharge the 100-year flood without cumulatively increasing the water surface elevation more than a designated height. Because of the dangers and damages associated with major flooding, legislation has been developed to limit construction within identified flood-prone zones. When a floodplain is established, no additional obstruction (such as a building) should be placed in the floodplain that will increase the 100-year floodwater surface elevation.

The Chamberlin Hotel project area as well as all of Fort Monroe, is located within the one 100-year floodplain as designated by the Federal Emergency Management Agency. Flooding at Fort Monroe is frequent and often severe (Fort Monroe INRMP 2000). Executive Order (EO) 11988 requires federal agencies to reduce the risk of flood plain loss, minimize the impacts of floods on human welfare, and restore and preserve the natural and beneficial values served by floodplains. Federal agencies must evaluate potential effects of any action that may be taken in floodplains and consider alternatives to avoid adverse effects and incompatible development in floodplains. EO 11988 also requires federal agencies to provide opportunities for early public review of any plans for actions in floodplains.

3.4.4 Wetlands

The CWA regulates jurisdictional wetlands within the United States. Wetlands are defined as “those areas that are inundated or saturated by surface or ground water (hydrology) at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). Wetlands generally include swamps, marshes, bogs, and similar areas.”

EO 11990, Protection of Wetlands, requires federal agencies, including the Army, to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. Fort Monroe manages wetlands as part of its Integrated Natural Resources Management Plan (INRMP). The USFWS prepared a wetland inventory report for Fort Monroe in June 1998. No wetlands were identified by the USFWS in the Chamberlin Hotel project area.

Chesapeake Bay Preservation Area

The Chesapeake Bay Preservation Act defines the Chesapeake Bay Preservation Area into two separate areas, the Resource Protection Area (RPA) and the Resource Management Area (RMA). The RPA includes field-verified tidal wetlands and non-tidal wetlands connected by perennial surface flow and contiguous to tidal wetlands, tributary streams; or tidal shores. The RPA also includes a vegetated buffer 100 feet wide located adjacent to and landward of the aforementioned components, as well as along both sides of any tributary stream. The RMA includes a 100-foot wide distance landward of the RPA boundary (City of Hampton Zoning Regulations, 9VAC10-20-10 et seq.). The City of Hampton Zoning Ordinance addresses the implementation of the Chesapeake Bay Preservation Act. Article X of the Zoning Ordinance addresses uses allowed in the RPA, which include water-dependent activities, such as marinas, redevelopment, and uses permitted through the modifications or exceptions process.

Part IV of 9VAC10-20-10 et seq., City of Hampton Zoning Regulations, Land Use and Development Performance Criteria, establish criteria to implement the following objectives in new development or redevelopment: prevent a new increase in non-point source pollution, and achieve a 10% reduction in non-point source pollution from development on previously developed land where the runoff was not treated by one or more water quality BMPs. This also requires storm water management criteria consistent with the water quality provisions of the Virginia Storm Water Management Regulations (4VAC 3-20). Section 9VAC10-20-130.10 states that storm water management and erosion and sedimentation control requirements must be applied for redevelopment activities. Redevelopment is permitted within a RPA, provided that a water quality Impact Assessment (WQIA) is reviewed and approved prior to the start of construction

activities, that a Plan of Development is followed, and that the project complies with applicable erosion and sedimentation control and storm water requirements. This project will comply with the Water Quality provisions of the Chesapeake bay Act, dated 2002. Furthermore, General Performance Criteria, found in section 9VAC-10-20-120 of the CBPA regulations, apply to any development within a Chesapeake Bay Preservation Area.

The Cooperative Agreement between the Department of Defense (DOD) and Environmental Protection Agency Concerning Chesapeake Bay Activities, states the DOD will "design, locate, and construct new development in a manner that will minimize its impact on the Chesapeake Bay and its tributaries and in consonance with the President's goal of no net loss of wetlands."

A portion of the proposed project area falls within the RPA. The Richmond office of the Chesapeake Bay Local Assistance Department (CBLAD) has been contacted regarding impacts to the RPA within the proposed project area. According to the Richmond CBLAD, the proposed action would be considered redevelopment and therefore an allowed use in the RPA (Suttenfield 2004). If additional impacts to the RPA should occur as a result of this project, which are more than 5,000 to 10,000 square feet, mitigation would occur in the form a vegetated buffer.

3.4.5 Coastal Zone Management

The Federal Consistency provision of the Coastal Zone Management Act (CZMA) requires that federal actions that have reasonably foreseeable effects on coastal resources must be consistent with the enforceable policies of a coastal state's federally approved coastal zone management program, which in the Commonwealth is the Virginia Coastal Resources Management Program (VCRMP). Enforceable programs within the VCRMP consist of the following:

- Fisheries Management (Code of Virginia § 28.2-200 thru 28.2-713, § 29.1-100 thru 29.1-570, § 3.1-249.59 thru 3.1-249.62)
- Subaqueous Lands Management (Code of Virginia § 28.2-1200 thru 28.2-1213)
- Tidal and Nontidal Wetlands Management (Code of Virginia § 28.2-1301 thru § 28.2-1320, § 62.1-44.15.5)
- Dunes Management (Code of Virginia § 28.2-1400 thru 28.2-1420)
- Non-point Source Pollution Control (Code of Virginia § 10.1-560 *et. seq.*)

- Point Source Pollution Control (Code of Virginia § 62.1-44.15)
- Shoreline Sanitation (Code of Virginia § 32.1-164 thru § 32.1-165)
- Air Pollution Control (Code of Virginia § 10-1.1300)
- Coastal Lands Management (Code of Virginia § 10.1-2100 thru § 10.1-2114, Virginia Administrative Code 9 VAC 10-20-10 *et seq*.)

3.4.6 Stormwater

Fort Monroe possesses a Virginia Pollution Discharge Elimination System (VPDES) General Permit for Municipal Separate Storm Sewer System (MS-4), (Permit # VAR040042). The permit was issued December 9, 2002 and expires December 9, 2007.

Storm drains are present on the Chamberlin Hotel site, based on site reconnaissance and the Fort Monroe Storm Water Pollution Prevention Plan and Drainage Area Map, dated May 1, 2000. Based on this mapping, five-storm drain inlets are located in the parking lot at the western side of the site. Another drain was visible outside of the kitchen door on the northwestern side of the hotel. Three other drains occur on the eastern side of the hotel and adjacent to the tennis courts. All drains in the parking lot drain through below ground pipes, directly out of the sea wall, into the Hampton Roads.

A VPDES permit, specifically a General Permit for Construction will be required for the construction of this project. This will be required as one acre or more of soil disturbance will occur. In order to secure this permit a Storm Water Management Plan, Storm Water Pollution Prevention Plan and an Erosion and Sedimentation Plan will have to be submitted and approved by the VDEQ. This is required pursuant to Virginia Code (9 VAC 25-180). Section 9 VAC 10-20-130.10 states that storm water management and erosion and sedimentation control requirements must be applied for redevelopment activities.

3.5 Ecological Resources

Ecological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to as vegetation and animal species are referred to as wildlife. Habitat can be defined as the resources and conditions present in an area that produces occupancy by a plant or animal species. Although the existence and preservation of biological resources are intrinsically valuable, these resources also provide aesthetic, recreational, and socioeconomic values to society.

For the purposes of this EA, these resources are divided into vegetation, wildlife, and threatened and endangered species.

3.5.1 Vegetation

According to the INRMP, native vegetation is sparse at Fort Monroe and exists in scattered locations around the salt marsh at Mill Creek and near remaining undisturbed shorelines. Common species in these areas include groundsel bush (*Baccharis halmifolia*), marsh elder (*Iva frutescens*), giant cordgrass (*Spartina cynosuroides*), saltmeadow hay (*Spartina patens*), and saltgrass (*Distichlis spicata*).

Vegetation within the Chamberlin Hotel project area has been landscaped and includes mowed grass and planted ornamental trees, shrubs and ground covers. Table 3-7 lists plant species found within the Chamberlin Hotel project area. Based on observations during site reconnaissance, most species are senescing or already dead.

Table 3-7. Vegetative Species Occurring within the Proposed Project Area

Scientific Name	Common Name	Stratum
Ilex opaca	American holly	tree
Magnolia grandiflora	Southern magnolia	tree
Buxus sempervirens	common boxwood	shrub
Ilex cornuta	Chinese holly	shrub
Ilex crenata	Japanese holly	shrub
Ligustrum japonicum	Japanese Privet	shrub
Osmanthus heterophylla	false-holly	shrub
Liriope muscari	liriope	herbaceous
Stellaria media	chickweed	herbaceous
Festuca sp.	fescue	herbaceous

Phragmites australis (common reed) an invasive wetland species that is difficult to eradicate once established, has been an issue at Fort Monroe. Therefore, it is recommended that clean fill dirt, free of common reed rhizomes be used during the construction phase of the project. This will greatly reduce the likelihood of occurrence of this highly invasive species.

3.5.2 Wildlife

Fort Monroe is a developed military installation; thus, wildlife found on the base are species accustomed to noise and human presence. According to a comprehensive survey conducted in 1998 by Galvez et al., 19 fish species representing 12 families were found in Mill Creek. In addition, 24 mammal species were identified and 68 bird species were found to be using Fort Monroe as breeding grounds (Fort Monroe 2000).

3.5.3 Threatened and Endangered Species

No threatened or endangered species are known to inhabit the Chamberlin Hotel project area. A biodiversity survey was conducted at Fort Monroe in 1998 during which no threatened or endangered animals were found; however, a state record was made for red lovegrass (*Eragrostis secundiflora* var. *oxylepis*) and beach plum (*Prunus maritima*) at Fort Monroe in subsequent surveys. Red lovegrass is considered invasive and was proposed for careful monitoring and possible eradication. Beach plum grass has been proposed for use in Fort Monroe's dune plantings and restoration (Fort Monroe 2000). Beach plum and red lovegrass are not on the state list of threatened or endangered species (http://www.dcr.state.va.us/).

A query was conducted during research for this environmental assessment on the Natural Heritage Program website for plant and animal species with state or federal legal status in the City of Hampton (http://www.dcr.state.va.us/). The search returned no results; however, the Fort Monroe INRMP notes that bald eagles (*Haliaeetus leucocephalus*), piping plovers (*Charadrius melodus*), and peregrine falcons (*Falco peregrinus*) nest periodically on portions of Fort Monroe. The bald eagle and piping plover are federal and state listed threatened species. The peregrine falcon was removed from the federal list of threatened and endangered species August 25, 1999. It has been designated as a federally recovered species and is currently being monitored throughout its range

(http://endangered.fws.gov). The peregrine falcon continues to be on the state list as a threatened species. The INRMP mentions that two additional state listed species could occur at Fort Monroe, the state endangered canebrake rattlesnake (*Crotalus horridus atricaudatus*) and the state threatened Mabee's salamander (*Ambystoma mabeei*). Neither of these species were seen during the 1998 biodiversity survey (Fort Monroe 2000).

3.6 Physical Resources

Physical resources are geological resources. These are defined as the geology, soils, and topography of a given area. The geology of an area includes bedrock materials, mineral deposits, faults, aquifer recharge zones, and fossil remains. The principal geologic factors influencing stability of structures are soil stability and seismic properties. Soil, in general, refers to unconsolidated earthen materials overlying bedrock or other parent material.

Fort Monroe is in the coastal plain physiographic province of Virginia. Physiographic provinces are landform regions or areas of similar terrain shaped by a common geologic history (Radford website). The coastal plain physiographic province is a generally flat, seaward sloping lowland. It is underlain by layers of Cretaceous and younger clay, sand, and gravel deposited by rivers carrying sediment from the eroding Appalachian mountains to the west. According to the Virginia Division of Mineral Resources, fossiliferous marine sediments were interlayered with fluvial, estuarine, and beach strata as the sea level rose and fell (VA Division of Mineral Resources website). A review of the *USGS Digital Data Series* (U.S. Geological Survey, 1994) reveals that the site is part of the Cenozoic Era of the Quaternary System in the Pleistocene Series. Bedrock is found at 1,000-1,500 feet (Fort Monroe 2000).

The majority of soils at Fort Monroe were mapped as Urban complex (285 acres) followed by Fill complex (121 acres). Soils located at the Chamberlin Hotel project site are listed as urban land in the Tidewater Cities Area, Virginia Soil Survey (USDS 1995). The urban land, map unit is described as consisting of areas where more than 85% of the surface is covered by asphalt, concrete, buildings, or other impervious surfaces. Areas of

undisturbed soils may be included in this mapping unit and commonly include the well-drained Emporia soils and the moderately well-drained Slagle soils. Undisturbed soils are found on about 15 % of the urban land map unit.

The topography at Fort Monroe is relatively flat, ranging from 0 ft. above mean sea level (msl) to 14 feet above msl (Fort Monroe 2000 and www.topozone.com). Much of the diversity in elevation is a result of filled land. According to the Integrated Cultural Resources Management Plan (ICRMP), the Army doubled the landmass of Fort Monroe through land filling activities. In the early nineteenth and twentieth centuries, marshland and large areas of Mill Creek were reclaimed to make land for military activities (Fort Monroe 2003). Fort Monroe has documentation from the 1930s stating that fill had been brought in form the Dismal Swamp in several land-building episodes (Schenian 2004b)

3.7 Land Use

Fort Monroe is comprised of 568 acres. This acreage includes 85 acres of wetlands and 108 acres of submerged land. The remaining 375 acres are improved or semi-improved. Much of the improved land has been modified for the military mission or is landscaped (Fort Monroe 2000). Fort Monroe is located within the City of Hampton, Virginia. The communities of Phoebus, Buckroe, and down town Hampton are nearby.

Land use generally refers to human occupation and modification of land, often for residential or economic purposes. Land use planning is primarily concerned with guiding and shaping new development and redevelopment while protecting significant environmental, historic, or cultural features. Natural land uses are classified into wildlife areas, forests, and other open or undeveloped areas. Human land uses include residential, commercial, industrial, utilities, agricultural, recreational and other developed uses. Management plans, policies, ordinances, and regulations determine the types of uses that are allowable, or protect specially designated or environmentally sensitive uses. Land use neighboring Fort Monroe is primarily residential, light industrial, and recreational and is compatible with the Army mission. Land uses at Fort Monroe consist of administrative, airfield, ammunition storage, troop, industrial/service, moat, parade grounds, and submerged area. The largest land use category composes 193 acres and is

recreation. The smallest land use category is troop. Recreation consists of playgrounds, parks, open lawns, playing fields, beaches, pools, bowling alleys and recreation centers. The troop category consists of housing for enlisted personnel.

3.8 Socioeconomic Resources

Socioeconomic analyses generally include detailed investigations of the prevailing population, income, employment, and housing conditions of a community or area of interest. The socioeconomic conditions could be affected by changes in the rate of population growth, changes in the demographic characteristics of a region of influence (ROI), or changes in employment within the ROI caused by the implementation of the proposed action.

According to U.S. Census Bureau information, the City of Hampton had a population of 145,665 in the year 2000. People under the age of 18 composed 24.2% of the population and those over 65 composed 10.3% of the population. The number of persons with disabilities over age five was 23,660. Approximately 86% of the population over age 25 were high school graduates.

The average number of persons per household was 2.49 and homeownership was 58.6%. The median household income in 1999 was $39,532. The percentage of persons below the poverty level in 1999 was 11.3% (U.S. Census Bureau website).

The average income of retired military officers is dependent on rank and years of service. A colonel has typically been in the Army for at least 20 years and has a salary range of between $60,000 and $75,000 per year. A general has been in the Army at least 25 years and has a salary around $100,000 per year. Most retire from the military around the age of 50 and then go into business careers, often as defense contractors. The retired colonels and generals who then work for 20 years are likely to be the ones that would be interested in living in the Chamberlin (Schenian, personal communication).

3.9 Environmental Justice

Executive Order (EO) 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 1994) requires federal

agencies to address disproportionately high and adverse human health or environmental effects on minority and low-income populations. This EO "make achieving environmental justice part of its mission".

A minority population can be described as being composed of (CEQ 1997) American Indian or Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic, and exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population.

The majority of the City's population was caucasian (49.5%) followed closely by African Americans (44.7%). Almost 3% of the population was of Hispanic or Latin descent. A smaller percentage of the population was reported as Asian (1.8%), American Indian and Alaska Natives (0.4%), or other (1.0%).

3.10 Cultural Resources


Source: ICRMP, 2003

Cultural resources include prehistoric and historic districts, structures, sites, artifacts, or any other physical evidence of human activities considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Cultural resources can be divided into three major categories: architectural resources, archeological resources (prehistoric and historic), and traditional cultural resources. Archeological resources are locations and objects from past human activities. Architectural resources are standing structures that are usually, over 50 years of age and are of significant historic or aesthetic importance to be considered for inclusion in the National Register of Historic Places (NRHP). Traditional cultural resources hold importance or significance to Native Americans or other ethnic groups in the persistence of traditional culture. These may include archeological sites, buildings, prominent topographic features, objects, habitats, plants, animals, and minerals. The significance of

such resources relative to the Native American Graves Protection and Repatriation Act and/or eligibility for inclusion in the NRHP is considered a part of the EA process. The regulations and procedures in 36 CFR 800, which implements Section 106 of the NHPA, requires federal agencies to consider the effects on properties listed in, or eligible for inclusion in the NRHP. Prior to approval of the proposed action, Section 106 requires that the Advisory Council on Historic Preservation be afforded the opportunity to comment.

Fort Monroe is one of the nation's most significant collections of historic properties. The Secretary of the Interior designated the large stone fortification a National Historic Landmark (NHL) on December 19, 1960. The Secretary of the Interior designates only historic properties of national significance as an NHL. Fort Monroe was placed on the National Register of Historic Places on October 15, 1966. The Secretary of the Interior declared the rest of Fort Monroe a NHL enclosed within the floodwall in 1973. All buildings on Fort Monroe, except for those located on Dog Beach, are within the boundaries of the Fort Monroe NHL district. The Fort Monroe NHL district consists of 157 Army-owned contributing elements, plus the Chamberlin Hotel (privately owned), the Old Point Comfort Lighthouse (owned by the Coast Guard), and St. Mary's Star of the Sea Catholic Church and rectory (owned by the Diocese of Richmond). The Fort Monroe NHL is designated archaeological site number 44HT27.

The principal task for the Fort Monroe cultural resources management program is to ensure the significant historic properties are not adversely affected by the daily maintenance and repair operations or by other projects, such as major construction or rehabilitation. One aspect of assuring historic properties are not affected is to know which elements are original and contribute to the NHL designation. Another important aspect is to be able to react quickly and appropriately if previously unknown historic properties are unexpectedly discovered. Although much work has been done to identify the historic properties at Fort Monroe, the possibility for an unexpected discovery still exists. (Integrated Cultural Resources Management Plan Fort Monroe, Virginia Christopher L. McDaid, REMSA, Inc., and Pamela A. Schenian, J.M. Waller Associates June 23, 2003)

Fort Monroe is a National Historic Landmark (NHL) and is listed on the National Register of Historic Places. The Historic Sites Act of 1935 (45 Stat. 666, 16 U.S.C. 461 et seq.) authorized the Secretary of the Interior to determine which historic and archaeological sites, buildings, and objects were of exceptional national historical or archaeological significance. The Secretary of the Interior declared Fort Monroe to be a National Historic Landmark in 1961. The National Historic Preservation Act was enacted in 1966, and Fort Monroe was listed on the National Register of Historic Places in 1966.

3.10.1 Archeological Resources

Fort Monroe is considered one large, complex archaeological site, with separate areas of intact archaeological deposits considered as loci within the larger site, rather than as discrete sites. The Chamberlin project area, was not investigated in the Phase I Archeological Investigations at Fort Monroe Virginia and Old Point Comfort (44HT27), Hampton, Virginia (DHR File #96-0873-F). This was a result of the condition of the land-lease and the fact that most of the area was developed. Recent excavations in areas near the Chamberlin site have revealed that fill deposits are at least 4 ft. to 8 ft. deep, if not more. The geological boring data suggests that the 1896 ground surface is 9 feet below the current ground surface in the Chamberlin project area. The only potential for archeological deposits is as deeply buried sites. An intense fire destroyed the first Chamberlin Hotel in 1920. This fire would likely have turned any materials into uninformative melted or charred material. The second Chamberlin Hotel, which stands today, would probably have disturbed evidence of a large portion of the footprint of the Chamberlin (letter to Kathleen Kilpatrick from Craig L. Simoneau, Lieutenant Colonel, U.S. Army, Director, Public Works and Logistics, dated April 9, 2004).

3.10.2 Historic Architectural Resources

Presently, the Chamberlin is an abandoned 280 room hotel, which was built in 1928. The existing structure is approximately 212,000 square feet, and nine stories above grade. All existing facades are red brick. There are approximately 165 current parking spaces on an adjacent surface lot. The subject property is located within the Fort Monroe National Historic Landmark districts and is individually listed on the Virginia Landmarks Registry.

3.11 Hazardous Materials and Waste Management

Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, or any materials that pose a potential hazard to human health and safety or the environment due to their quantity, concentration, or physical and chemical properties. Hazardous wastes are products characterized by their ignitability, corrosiveness, reactivity, and toxicity. Hazardous waste includes any waste which, due to its quantity, concentration, or physical, chemical, or infectious characteristics, may either (1) cause or significantly contribute to an increase in mortality, serious irreversible illness, or incapacitating reversible illness; or (2) pose a substantial threat to human health or the environment. Fort Monroe does not treat or directly dispose of any hazardous waste.

Hazardous materials and waste are managed in accordance with the following laws: Federal Water Pollution Control Act, CWA, Solid Waste Disposal Act, RCRA, CERCLA, CAA, and Federal Insecticide, Fungicide, and Rodenticide Act. Fort Monroe's *Hazardous Waste Management Plan* details hazardous waste stream inventory and identifies all types of hazardous waste generated at authorized locations. It includes operational procedures, which apply to collection and temporary storage of hazardous wastes at initial accumulation sites.

Fort Monroe is a Large Quantity Generator of hazardous waste (ID # VA5210020603). However there are no hazardous materials or waste recorded for the Chamberlin Hotel, or the property in general. Fort Monroe is not permitted as a transporter or disposal/treatment facility; therefore, several contracted transporter and disposal/treatment service companies are employed by Fort Monroe to remove hazardous wastes. A contractor is also employed to collect and dispose of solid waste, at off-site disposal locations.

Fort Monroe also maintains a Spill Prevention Control and Countermeasures (SPCC) Plan, and Lead Based Paint Management Plan and the Asbestos Management and Operating Plan. As the hotel is not owned by the U.S. Government, it is not included in these plans.

3.11.1 Hazardous Waste Storage

There are no records of hazardous waste storage at the Chamberlin Hotel, or on the parcel to be leased. Based on discussions with DPW/L personnel at Fort Monroe, any waste from the hotel would have been taken off base by contracted private companies. Some materials are presently located in the hotel. These consist of paints, paint thinners, pool chlorine, and cleaning chemicals. A Phase I Environmental Site Assessment (ESA) has been initiated, but has not been completed at this time. Lead-based paint and asbestos containing materials were located in the hotel, according to a Phase I ESA by Rickmond Engineering, dated 1991. In the Draft Report, Asbestos Air Sample Survey of the Chamberlin Hotel, Fort Monroe, Virginia, by Versar Inc. for USACE Jorge Nadal Program Mgr. Nov. 11, 1987, no asbestos was detected in the hotel at the time of the survey. Ordnance may be buried on site. The Ordnance Survey of 1995 showed many anomalies that may be unexploded ordnance or some other magnetic anomaly, see Section 3.12.

3.11.2 Environmental Restoration Program

The Department of Defense created the Installation Restoration Program (IRP) to investigate past hazardous and toxic materials storage and disposal activities at military installations as required by RCRA. The mission of the IRP is to identify and clean up contamination resulting from past Department of Defense use and disposal practices for the protection of human health and the environment. No identified IRP sites are located in the vicinity of the project site, and none have the potential to impact the site. However, one underground storage tank was located during the visual inspection for the Phase I ESA, at the western end of the hotel. This would most likely be utilized to store fuel associated with heating the hotel. One above ground storage tank (AST) was located inside the basement, for water storage and one AST was located outside the hotel at the western side of the hotel. This was used to store diesel fuel for the hotel generator.

3.11.3 Pollution Prevention

The Compliance Through Pollution Prevention (P2) Plan Update Fort Monroe, Virginia (Ft. Monroe, Environmental Division, Directorate of Public Works, September 2002) establishes the Fort Monroe P2 Program and sets forth the installation objectives for reducing air, land, surface water, and groundwater pollution at the installation. The P2 Plan is an installation-developed document that provides guidance to personnel who work with pollution-generating activities. The Fort Monroe P2 Update describes compliance thresholds, goals, baselines and progress, pollution generating activities, storage areas and initiatives for pollution prevention. This plan focuses on twelve subject areas: (1) hazardous and industrial waste, (2) solid waste, (3) air emissions, (4) water, (5) wastewater, (6) storm water, (7) Toxic Release Inventory (TRI) form R chemical releases, (8) EPA priority chemicals, (9) ozone depleting substances, (10) vehicle fuel, (11) energy, and (12) affirmative procurement of environmentally friendly products.

Based on this P2 Plan it is recommended that any renovations or construction activities consider the use of the deconstruction process to recycle building materials and reduce the waste stream at Fort Monroe.

3.12 Safety and Occupational Health

Construction site safety and prevention of mishaps is an ongoing activity for any Army job site. As a part of the contracts for construction services, standard terms and conditions include safety at the forefront. Areas of concern include compliance with confined space regulations; minimum personal protection equipment standards to include footwear, hardhats, and eye protection; heavy equipment operations; and limited access to the area.

Fort Monroe is located on Old Point Comfort, which has been a fortified military site almost continuously since 1609. A post- wide unexploded ordnance (UXO) survey done in 1995 found a total of 86 magnetic anomalies on the Chamberlin Hotel site, 27 of which were located in the area of the parking lot, the only part of the project area where “intensive intrusive activities” (pile driving) would be planned. The Survey Report also estimated that for the post as a whole, as much as 1.8% of all anomalies found should be

considered “probable UXO’s”. However, a review of past historical uses of the Chamberlin site indicates a smaller chance of encountering UXO’s in the project area. The original Chamberlin Hotel, a building of comparable size to the current hotel, stood on the site from 1896 to 1920, when it burned. In the adjacent parking lot area, a large, three- story wooden building stood from 1900 until the mid 1950’s, when it was also demolished on site. Geological boring data indicates that the grounds of the hotel and parking lot are also a historical fill area. The top nine feet is composed of twentieth century fill that includes rubble from various building demolitions, as well as the architectural metals and contents of the first Chamberlin Hotel. Thus, anomalies on the Chamberlin site are much more likely to be associated with metal debris from post-1896 building construction and demolition/loss than with ordnance.

Accordingly, based on a review of existing records, and available information regarding the likelihood of UXO being present at the site, a UXO Survey is not warranted at this time. Rather, UXO safety procedures for the site would be the same as those routinely required by the Fort Monroe Safety Division at other similar construction sites on Fort Monroe. Specifically, the construction site safety officer will provide a complete briefing for all members of the construction crew, to include a warning that UXO’s might possibly be encountered. In the event suspicious material is discovered on site, all work will cease immediately, the area will be cordoned off and Explosive Ordnance Disposal personnel from nearby Langley AFB and Yorktown Naval Weapons Station will be summoned to investigate and direct any necessary action.

Fort Monroe has a Lead Based Paint (LBP) Management Plan, which focuses on the safe management of these materials and the elimination of potential hazards to the workforce residents and environment. Prior to renovation a lead based survey should be completed, abatement should take place if necessary.

The Fort Monroe Asbestos Management Plan provides guidance on and outlines procedures for asbestos-related management and abatement programs. Prior to renovation an asbestos inspection for asbestos-containing materials (ACMs) should be performed and the asbestos abated, or an operations and management plan implemented, if necessary. Safety and Health Regulations regarding confined spaces, minimum

personal protection equipment standards, limited access to the job site, and other items would be followed.

A one-company fire department is located at Fort Monroe. The department is adequately staffed and has sufficient equipment. This fire department has an inter-service support agreement with Langley Air Force Base and the City of Hampton.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This section presents the potential environmental impacts of implementing either the proposed action or the no action alternative. The potential impacts to the human and natural environment were evaluated relative to the existing environment described in Section 3.0. For each environmental resource or issue, anticipated direct and indirect effects were assessed, considering both short-term and long-term project effects.

4.2 Air Quality

Impacts to air quality would be considered significant only if any criteria pollutant emissions associated with the implementation of the proposed action or alternative would exceed the rates specified for marginal non-attainment areas for O_3 (Table 3-3), would be regionally significant, or would contribute to a violation of Ft. Monroe's stationary source permit limitations.

4.2.1 Proposed Action

Implementing the proposed action would have a minor, temporary impact on local air quality; however, emissions are not expected to exceed the rates specified for marginal non-attainment areas for O_3, be regionally significant, or contribute to a violation of Fort Monroe's stationary source permit limitations. The primary impact would be directly related to the generation of PM_{10} at and around the project areas during the preliminary stages of construction. These emissions would primarily be a function of (1) construction activities, such as grading and excavation; (2) movement of dust (wind erosion) from 'piled' materials; and (3) mechanical entrainment of road dust.

Construction Activities

The potential air-quality impact resulting from construction activities would be minor and temporary, and would disperse with distance from the project area. Particulate emissions from construction-based activities depend on a number of considerations including, but not limited to:

1. The number and type of vehicles (earthmovers);

2. The construction activity (demolition and debris removal, site preparation, and general construction);

3. The materials used (asphalt, concrete);

4. The controls utilized to minimize fugitive emissions from area sources (watering exposed soils); and

5. The installation of asphalt pavement.

Construction activity is subject to Virginia State Air Pollution Regulation 9 VAC 5-50-90, Standards for Fugitive Dust/Emissions, which states that during construction reasonable precautions must be taken to prevent particulate matter from becoming airborne. Such precautions include, but are not limited to, the use of water to control dust during building construction, road grading, and land clearing; covering open equipment used to convey materials likely to create air pollution; and promptly removing spilled or tracked dirt from streets. Implementing abatement measures such as proper maintenance of construction vehicles, limiting the size of the disturbance area, and watering unpaved roadways as necessary would minimize potential impacts (Virginia State Air Pollution Control Board, 1985).

Hampton Roads Intrastate Air-quality Control Region is in attainment for PM_{10}; therefore, PM_{10} is not carried forward in the applicability analysis. Fugitive particle and associated PM_{10} emissions due to the heavy construction activities is the only anticipated stationary source during the construction phase of the proposed action. These increases would not significantly contribute to a violation of Fort Monroe's stationary source permit limitations (Table 4-1).

Table 4-1. Construction PM10 Emissions Compared to Fort Monroe Permit Limits

PM_{10} Emissions	**TPY**
Baseline[1]	0.34
Proposed Construction	2.20
Projected Basewide Total Including the Proposed Construction	2.54
Fort Monroe Permit Limits	17.5

1 Total Stationary Source PM_{10} Emissions at Fort Monroe (2003)
tpy = tons per year

Combustive emissions from construction equipment exhausts were estimated using emissions factors for off-road equipment (USEPA, 1991; Waier, 2001). The USEPA assumes that 230 working days (8 hours per day) are available per year for construction (accounting for weekends, weather, and holidays) (USEPA, 1995). Criteria pollutant emissions associated with the implementation of the proposed action do not exceed the rates specified for marginal non-attainment areas for O_3 (Table 4-2). The proposed action is not regionally significant because the emissions do not exceed 10 percent or more of the marginal non-attainment area's total emissions for that particular pollutant (AQCR 223) (Table 4-3). A record of non-applicability (RONA) to the general conformity rule can be found in Appendix A.

Table 4-2. Construction Emissions Compared to Applicability Thresholds

Criteria Pollutants	Applicability Threshold (tpy)	Total Construction Emissions (tpy)	Violates Applicability Threshold
NO_x	100	0.56	No
VOCs	50(100)	0.21	No

tpy = tons per year

Table 4-3. Construction Emissions Compared to AQCR 223 Total Emissions

Criteria Pollutants	AQCR 223 Total Emissions* (tpy)	Construction Emissions (tpy)	Percent Total	Regionally Significant
NO_x	32758	0.56	< 0.01%	No
VOCs	6571	0.21	< 0.01%	No

* Source: VDEQ 2002
tpd = tons per day

Operation and Support Services Activities

There would be minor indirect emissions from support services after construction and demolition completion. For an increase in occupied heated space of 50,000 ft^2 in Hampton Roads Virginia, a corresponding estimate increase in natural gas usage of 1,000,000 cubic feet per year is anticipated for heating and cooling of the building. Associated emissions would not exceed the rates specified for marginal non-attainment areas for O_3, would not be "regionally significant," or significantly contribute to a violation of Ft. Monroe's permit limitations (Table 4-4).

Table 4-4. Estimated Emissions from Anticipated Support Services

Constituent	Emission Factor ($lb/10^6 ft^3$)	Total Increase in Emissions (tpy)
NO_x	94.0	4.72E-02
VOC, non-methane	5.5	2.76E-03

lb = pound
10^6 = 1,000,000
f^3 = cubic feet
tpy = tons per year

There are 188 hazardous air pollutants (HAPs), also known as toxic air pollutants, specifically listed by the USEPA pursuant to Title III of the CAA amendments. HAPs are pollutants that cause or may cause serious health effects and have adverse environmental or ecological effects. HAPs emitted by natural gas boilers include arsenic, cadmium, chromium, lead, manganese, mercury, and nickel. Estimated organic and inorganic HAP emissions that would result from implementing the proposed action, estimated at 0.000949 tons per year, are listed by individual organic and inorganic component in Table 4-4 and 4-5

Table 4-5. Estimated Organic HAP Emissions

Constituent	Emission Factor ($lb/10^6 ft^3$)	Total Increase in HAP Emissions (tpy)
Benzene	2.10E-03	1.06E-06
Dichlorobenzene	1.20E-03	6.03E-07
Formaldehyde	7.50E-02	3.77E-05
Hexane	1.80E+00	9.05E-04
Naphthalene	6.10E-04	3.07E-07
Polycyclic Organic Matter	8.85E-05	4.45E-08
Toluene	3.40E-03	1.71E-06
TOTAL		9.46E-04

lb = pound
10^6 = 1,000,000
ft^3 = cubic feet
tpy = tons per year

Table 4-6. Estimated Inorganic HAP Emissions

Constituent	Emission Factor ($lb/10^6 ft^3$)	Total Increase in HAP Emissions (tpy)
Arsenic	2.00E-04	1.01E-07
Beryllium	1.20E-05	6.03E-09
Cadmium	1.10E-03	5.53E-07
Chromium	1.40E-03	7.04E-07
Cobalt	8.40E-05	4.22E-08
Lead	5.00E-04	2.51E-07
Manganese	3.80E-04	1.91E-07
Mercury	2.60E-04	1.31E-07
Nickel	2.10E-03	1.06E-06
Selenium	2.40E-05	1.21E-08
TOTAL		3.05E-06

lb = pound
10^6 = 1,000,000
ft^3 = cubic feet
tpy = tons per year

The additional HAP emissions constitute less than 0.1 percent of the entire installation HAP emissions, which is 0.354 tons per year at Fort Monroe. The USEPA is proposing national emission standards for HAP emissions (NESHAP) for industrial/commercial/institutional boilers and process heaters. The proposed rule would implement Section 112(d) of the CAA by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT) (Federal Register 68:8, Monday, 13 January 2003). Fort Monroe should continually review the regulatory changes in this area to ensure compliance with respect to current, proposed, and reasonably foreseeable HAP emissions.

Cumulative Impacts

Implementing the proposed action would have no ongoing or cumulative impact on air quality due to construction or operation activities. The construction and operational emissions for the proposed rehabilitation of the Chamberlin Hotel would be so small that their relative contributions to the cumulative air-quality environment would be unnoticeable.

4.2.2 No Action Alternative

Selecting the no action alternative would result in no impacts to ambient air-quality conditions of the project area or surrounding areas since no construction activities would be undertaken and no changes in operations would be expected. Ambient air-quality conditions would remain as described in Section 3.2.1.

4.3 Noise

This environmental assessment evaluates potential changes to existing noise environments that would result from implementation of the proposed action and alternatives. Construction noise and its potential impacts on nearby receptors will be addressed. Impacts would be considered significant if there were expected long-term increases in the number of people highly annoyed by the noise environment, noise associated adverse health effects to individuals, or unacceptable increases to the noise environment for sensitive receptors. A sensitive receptor is any person or group of persons in an environment where low noise levels are expected, such as schools, daycare centers, hospitals, and nursing homes.

4.3.1 Proposed Action

Implementing the proposed action would have a minor temporary impact on the noise environment. Implementing the proposed action would increase the levels of noise within the immediate project areas through the use of construction equipment. The sound would attenuate rapidly with distance from the site. The overall noise environment with respect to sensitive receptors, communities and individual residents would return to normal after the initial stages of construction.

Construction

Construction activities would occur for periods of 8 hours a day, Monday through Saturday. The primary sources of construction noise would be due to the use of soil moving units, heavy trucks, and additional light construction equipment (Table 4-7) (Waier, 2001). Table 4-7 provides a breakdown of each piece of equipment and its contribution to the construction noise during the initial stages of construction. The values are based on estimated periods of use during a typical workday and assume equipment

would generally operate at or near its maximum sound levels anywhere from 20-50% of the time (Thalheimer, 2000).

Table 4-7. Expected Equipment and Contribution to Overall Construction Noise

	Number of Units	Lmax at 50 Feet [dBA]	Impact Device?	Unit Usage Factor	Total Usage Factor	Estimated Leq at 50 Feet [dBA]
All other equipment > 5 HP	2	85	No	0.5	1.0	82.0
Backhoe	2	80	No	0.4	0.8	79.0
Generator (more than 25 KVA)	1	82	No	0.50	0.5	79.0
Grader	1	85	No	0.40	0.4	81.0
Pickup Truck	5	55	No	0.40	2.4	58.8
					Leq Total	86.5

The region of influence (ROI) for this noise analysis is the area within 500-foot radius of the construction site boundary. This is the estimated distance necessary to attenuate the overall noise environment to 65 dBA [DNL] (Figure 4-1). This is the standard recognized noise level compatible for a wide range of uses, including communities and individual residences (FICON, 1992). The initial stages of construction are conservatively estimated to last for 60-90 days.

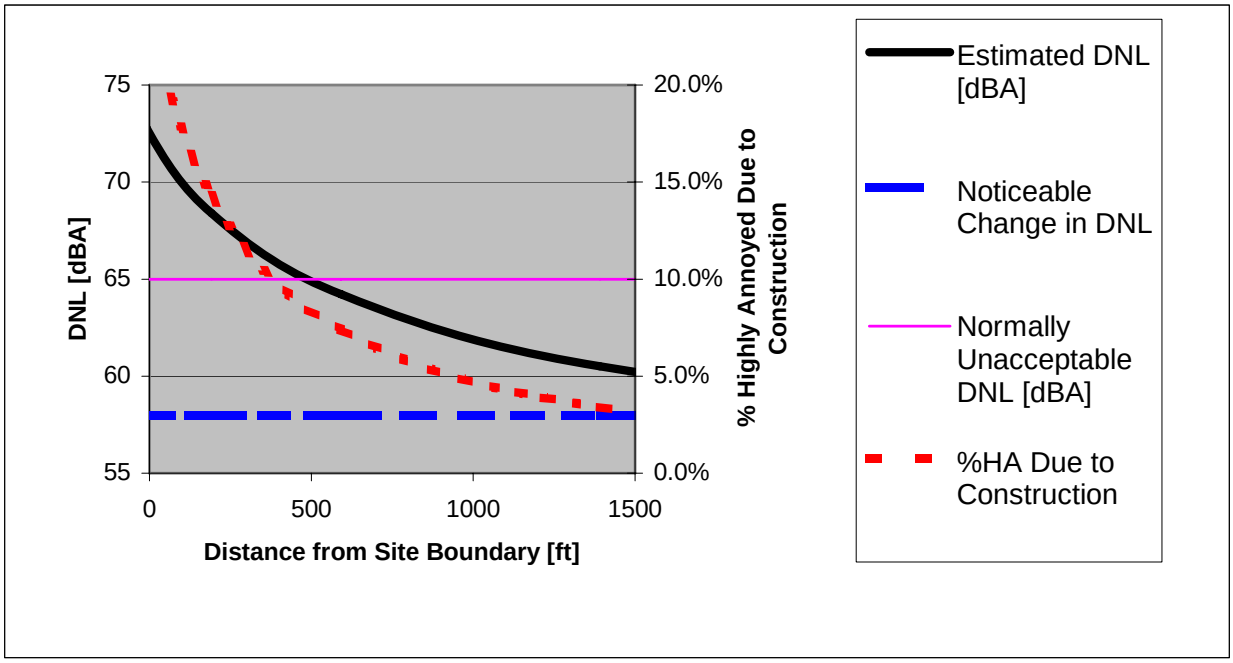

Figure 4-1. Distance from Site Boundary Vs. Day Night Sound Level and Percent Highly Annoyed Due to Construction Noise

No sensitive receptors, communities, or individual residents are located within the 500 foot radius; therefore, no sensitive receptors, communities, or individual residents would be exposed to excessive overall noise environment during the initial stages of construction (Table 4-7). Periodically the construction equipment may be audible at distances greater that 500 feet from the construction site boundary, but there will be no significantly noticeable change in the overall noise environment. Brief acoustical events could occur and have minor effects on speech intelligibility by way of brief and unnoticeable interruptions in communication. Due to the times of construction site operations, no sleep awakenings are expected. In general, the average reaction of receptors outside the ROI to the noise environment will be the same as if no construction were taking place.

Although no sensitive receptors are located within the ROI, the TRADOC headquarters building (Bldg 137), a VTC center (Bldg. 133) and Continental Park are in the vicinity of the site. Construction noises, especially pile driving, may sporadically interfere with some of the activities at these adjacent locations. The disturbance will be temporary in nature. Every effort will be made maintain an open dialog with these facility's staff to

reasonably control the hours of construction activities and specifically the use of heavy and noisy equipment. If necessary, an in place procedure for logging and responding to noise complaints will be implemented.

Construction noise is expected to be perceptible and dominate the soundscape for all individuals within the ROI, especially construction personnel. Construction personnel, and particularly equipment operators, should don adequate personal hearing protection to limit exposure and ensure compliance with federal health and safety regulations.

Operations

Implementing the proposed action, and the operation of the rehabilitated Chamberlin Hotel, would have no ongoing impact on the noise environment. Implementing the proposed action would increase the levels of noise within the immediate area through the use of operational support equipment and a slight increase in localized traffic. The overall noise environment with respect to areas beyond the site boundary will be the same as if no activities were taking place.

Cumulative Impacts

Implementing the proposed action would have no ongoing or cumulative impact on the noise environment due to construction or operation activities. The construction and operational noise for the proposed rehabilitation of the Chamberlin Hotel would be so small that their relative contributions to the cumulative overall noise environment would be unnoticeable. Due to the limited noise levels, frequency and duration of acoustical events during the construction and operation, the overall noise environment would be consistent with or less than the current or reasonably foreseeable noise levels in the area of the proposed site.

4.3.2 No Action Alternative

Selecting the no action alternative would result in no impact to the existing noise conditions of the project areas and surrounding areas. Under this alternative, there would be no construction or operational activities conducted and as a result, there would be no change in the current noise environment. It would remain as described in Section 3.3.

4.4 Water Resources

The analysis of water resources includes all surface and groundwater resources at Fort Monroe. Significant impacts to water resources could potentially occur if implementation of the proposed action resulted in changes to water quality or supply, threatened or damaged unique hydrologic characteristics, endangered public health by creating or worsening health hazards, or violated established laws or regulations. According to the Fort Monroe P2 Plan, the Chamberlin Hotel has been the largest water consumer at Fort Monroe.

4.4.1 Proposed Action

Under the proposed action, renovation, construction, clearing, and grading would not result in long-term negative impacts to water resources at Fort Monroe. However, the proposed activities could result in a temporary increase in runoff and sedimentation matter in nearby surface water features. To minimize potential impacts, BMPs, as described in the Fort Monroe Storm Water Pollution Prevention Plan (Fort Monroe 2002g), would be implemented, along with all Virginia Storm Water Regulations. Implementation of the proposed action would have no impact on groundwater resources. As stated in Section 3.4.3 all of Fort Monroe is designated as 100-year flood plain by FEMA. However, under the proposed action, no increase in impervious surfaces would result from this project. Therefore the base flood elevation should not change and the project would not negatively affect flooding in this area. The proposed construction activities would not occur in jurisdictional wetlands or waters of the U.S. Therefore, no adverse impacts would occur to water resources by implementing the proposed action.

4.4.2 No Action

Under the no action alternative, the proposed action at the Chamberlin Hotel project area would not occur, and water resources would remain unchanged.

4.5 Ecological Resources

Impacts to ecological resources would be significant if species or habitats of concern are adversely affected over relatively large areas or disturbances and impacts caused reductions in population size or distribution of a species of concern. This section analyzes the potential for impacts to ecological resources, such as habitat loss, from implementation of the proposed action or the no action alternative.

4.5.1 Proposed Action

There is a potential short-term negative effect on vegetation during the construction process; however, flora would be positively impacted on a long-term basis. Most of the vegetation in the Chamberlin Hotel project area is dead or dying. The proposed action would include a landscape plan that would incorporate native species into the design. Since Fort Monroe receives salt spray and high winds, salt tolerant native species would be used for replanting whenever possible.

The Proposed Action would have no effect on wildlife. The Chamberlin Hotel is located in a developed area where there is little wildlife habitat that would be impacted by implementation of the Proposed Action.

There would be no impact to threatened and endangered species under the proposed action, as no threatened or endangered species have been sited in the Chamberlin Hotel project area. The Chamberlin Hotel project area consists of a landscape of turf with ornamental trees, shrubs and groundcovers. A concrete sea wall separates the tidal shoreline of the Hampton Roads from the project area. Suitable habitat for the state and federally listed species discussed in Section 3.5.3 does not exist within the project site or the nearby vicinity.

4.5.2 No Action

Under the no action alternative, vegetation on site would remain unchanged, except for opportunistic species that may colonize the site over time. Wildlife species would also

remain unchanged, with the exception of the mallard ducks currently utilizing the vacant outdoor swimming pool. There would be no change to threatened and endangered species under the no action alternative.

4.6 Physical Resources

An impact would occur if the Chamberlin rehabilitation project resulted in the likelihood that geology and soils would be adversely impacted in a significant way at Fort Monroe. The potential impacts to sensitive geologic features and soil resources were considered for the location and development of the alternatives. Impacts would be considered significant if construction activities altered aquifer recharge zones or were located near faults or other geological hazards. Impacts to soils can occur if erosion control measures are not properly implemented.

4.6.1 Proposed Action

There would be no negative impacts from construction or grading activities on geological resources. There would be short-term negative effects on soil from construction and grading activities. Negative effects would be minimized by erosion and sediment controls. The Virginia Erosion and Sediment Control Law, Regulations, and Certification Regulations sets forth measures to control soil erosion, sedimentation, and nonagricultural runoff from regulated land-disturbing activities. The regulations provide the minimum standards including criteria, techniques, and policies that must be followed on all regulated activities. The Virginia Erosion and Sediment Control Handbook would be followed during the construction phase of the proposed project to minimize soil erosion and sedimentation. The proposed action would not affect the topography of the site.

4.6.2 No Action

There would be no change to geological resources or topography under the no action alternative. There would be a potentially long-term negative impact to soils under the no action alternative. Erosion from the dilapidated parking lot would continue and worsen over time, as bare areas of soil are exposed. Erosion would also be likely to take place in the landscaped areas, as the integrity of the roots on the dead ornamental plants fail, and the plants become uprooted, exposing areas of soil to the wind and rain. No erosion and

sediment control measures would be installed on the site to retard erosion under the no action alternative.

4.7 Land Use

The significance of potential land use impact is based upon the degree of sensitivity to land use changes affected by implementation of a proposed action. Typically, land use impacts are considered significant if they would: (1) violate or otherwise be inconsistent with adopted land use plans or policies; (2) undermine the viability of a preferred existing land use activity; (3) create threats to public health, safety, and welfare of adjacent or nearby land users; or (4) conflict with the fundamental mission of the installation.

4.7.1 Proposed Action

The land use of the Chamberlin Hotel would be changed from recreational to residential if the preferred alternative is selected. The Real Property Master Plan, Long Range Component, Fort Monroe, 1996 labels the area as community support on the Land Use Map. This action would create a strong positive impact as a vacant aging structure, parking lot and landscape would be renewed through renovation.

4.7.2 No Action

There would be no change to the existing land use under the no action alternative. The land designated as community support in the Real Property Master Plan, would not in any way support the community. The building and parking lot would remain closed. Further deterioration to these facilities would occur over time.

4.8 Socioeconomic Resources

The socioeconomic conditions could be affected by changes in the rate of population growth, changes in the demographic characteristics of the ROI, changes in spending in the local economy, or changes in employment within the ROI caused by the implementation of the proposed action. This section analyzes the potential impacts to socioeconomic resources.

4.8.1 Proposed Action

No adverse impacts to socioeconomics are expected under the proposed action. The proposed action would boost the local economy by creating jobs, and increasing spending in the local economy.

4.8.2 No Action

Under the no action alternative, the proposed action would not occur, and socioeconomics would remain unchanged.

4.9 Environmental Justice

Environmental justice at Fort Monroe would be impacted if implementation of the proposed action affected localized minority and/or low-income populations through impacts that would disproportionately affect the earning potential, distribution, or health of these sensitive populations. The degree of potential effects to populations of special concern is assessed by the percentage of individuals and/or populations affected.

4.9.1 Proposed Action

Implementation of the proposed action would not cause disproportionate impacts to these sensitive populations. The proposed military retirement center would have an equal opportunity policy for all retired officers.

4.9.2 No Action

Under the no action alternative, there would be no change to sensitive populations.

4.10 Cultural Resources

Cultural resources at Fort Monroe would be impacted if the Chamberlin rehabilitation project resulted in adverse effects on the historic property through renovation, construction, disturbance of buried archeological deposits, historic district or landscape. Earth-moving activities related to construction could impact the integrity of an archeological site, expose a previously unrecorded site, or impact unmarked prehistoric or historic burials.

4.10.1 Proposed Action

Implementation of the proposed action would alter the historic Chamberlin Hotel through the renovation process, and could potentially impact archeological deposits through disturbance during construction, clearing and grading activities. Since the project cannot proceed without historic preservation tax credits, and to receive tax credits, the project must be certified as meeting the Secretary of the Interior's Standards for Rehabilitation by VDHR, this ensures that the project will have no adverse affect on the Chamberlin or on the Fort Monroe National Historic Landmark. The potential of impacting intact archeological artifacts is very unlikely, due to the depth of man-made fill, see Section 3.10.1.

If any archeological resources (historic and/or prehistoric) are encountered during earth movement or the construction phases of the proposed action, the Fort Monroe archeologist and the SHPO would be notified to ensure compliance with 36 CFR §800.11. All construction work would be suspended until a qualified archeologist could determine the significance of the encountered resource(s), and the archeological deposits documented in accordance with professional standards.

No negative impacts to the historic hotel would occurr, as consultation will take place with the SHPO regarding historic resources at the site before any construction commences on the project. This will ensure that the project complies with Section 106 of the National Historic Preservation Act. Prior to construction a renovation plan in compliance with the Secretary of the Interior's *Standards for Rehabilitation* will be developed in consultation with the VDHR and the National Park Service. (Memo, April 14, 2004, Bob Mills, Commonwealth Architects). A Programmatic Agreement among Fort Monroe, the SHPO, Drucker and Falk, and other interested parties will be required to ensure that the ongoing operation and maintenance of the Chamberlin will comply with Section 106 requirments.

4.10.2 No Action

Selection of the no action alternative would result in no impacts to archeology. The no action alternative would allow the historic structure to continue to fall into disrepair, having a negative impact on this architectural resource and the Fort Monroe NHL.

4.11 Hazardous Materials and Waste Management

The significance of impacts associated with hazardous wastes and materials is based on the toxicity of the substance, the transportation and storage risk, and the method of waste disposal. Impacts would be considered significant if the storage, use, transportation, or disposal of these substances increases human health risks or environmental exposure.

4.11.1 Proposed Action

Under the proposed action, the Chamberlin Rehabilitation Project would have minimal potential impact on hazardous materials, as any hazardous materials would be handled and disposed of according to applicable state and federal regulations. Any required surveys for lead based paint or asbestos containing materials would be completed prior to renovations, and all required abatement measures would take place according to applicable regulations.

Implementation of the proposed action would impact the P2 program by generating excess scrap materials and recovered recyclables. Construction and demolition (C&D) debris consists of the waste generated during construction, renovation, and demolition projects. The amount of materials generated and percentages recovered differ sharply for demolition versus construction activities. With demolition activities, brick, concrete, asphalt, and metals are the most frequently recovered materials. Corrugated containers, wood waste, gypsum wallboard, and asphalt shingles are commonly recovered during construction activities. Various paints, solvents, glues, suspect asbestos, and lead wastes would add to the Fort Monroe hazardous waste stream during the period of renovation and construction. Waste streams would be managed in accordance with the Fort Monroe P2 Plan in order to minimize potential impacts.

4.11.2 No Action

Under the no action alternative, the proposed Chamberlin Rehabilitation Project would not occur. Baseline hazardous materials use and waste management would remain unchanged, and the P2 program would not be affected.

4.12 Safety and Occupational Health

An impact would occur if the Chamberlin Rehabilitation Project resulted in the likelihood that human health and safety would be negatively affected at Fort Monroe. Changes that result in unacceptable or unnecessary health and safety risks would be considered significant.

4.12.1 Proposed Action

Renovation of the Chamberlin Hotel and construction of the assisted living facility and parking deck would not result in long-term negative impacts to worker health and safety. Contract specifications for the proposed action would be implemented to protect worker health and safety. These specifications include preparation of a site-specific accident prevention plan and hazardous materials use plan. Additionally, the contractor renovating the hotel and constructing the new facility and parking deck would prepare and implement a Health and Safety Plan. Excavated soil would be handled to avoid and/or minimize the potential impact to personnel health and safety by dust control. Therefore, implementation of the proposed action would not adversely impact safety and occupational health at Fort Monroe.

4.12.2 No Action

The no action alternative would result in no effect to occupational health and safety of workers at Fort Monroe.

5.0 CUMULATIVE IMPACTS

The CEQ defines indirect and cumulative effects as the impact on the environment that results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such actions (40 CFR §1508.7). A critical principle of cumulative effects analysis states that the analysis should be conducted within the context of resource, ecosystem, and human community thresholds – levels of stress beyond which the desired future condition degrades (CEQ 1997). The magnitude and extent on a resource depends on whether the cumulative effects exceed the capacity (resilience or resistance to stress and the ability to recover) of the resource to sustain itself and remain productive. Similarly, the natural ecosystem and human community have maximum levels of cumulative effects that they can withstand before the desired conditions of ecological functioning and human quality of life deteriorates. The function of the cumulative impacts analysis is to ensure that the consequences of actions do not exceed these thresholds.

The scope of the cumulative effects would be limited to the project site. This project is expected to take place over an approximate two-year period.

No resources were found to have any measured effect resulting from implementation of the proposed action. The incremental contribution of impacts of the proposed action, when considered in combination with other past, present, and reasonably foreseeable actions, would be negligible.

Overall, the analysis for this EA indicates that the proposed action for the Chamberlin rehabilitation project would not result in, or contribute to, significant negative cumulative impacts to the resources in the region. The proposed action would renovate the interior of the hotel, with minimal exterior renovations, and provide a new assisted living facility and parking deck. The proposed activity would have no long-term negative impacts. In fact, the proposed action represents a positive cumulative impact to the environment compared to the existing conditions of the hotel.

Under the no action alternative, there would be a negative effect to indirect or cumulative impacts. As the impact of leaving the vacant facility as is, will allow an eyesore, and a dangerous and attractive nuisance at this Historic Landmark.

5.1 Irreversible and Irretrievable Commitment of Resources

This EA identifies any irreversible and irretrievable commitments of resources that would be involved in the proposed action if implemented. An irreversible effect results from the use or destruction of resources (e.g., energy) that cannot be replaced within a reasonable time. An irretrievable effect results from loss of resources (e.g., endangered species) that cannot be restored as a result of the proposed action.

5.1.1 Proposed Action

Use of fuel for operation of construction equipment represents the only irreversible commitment of resources in the proposed action. The amount of fuel used for activities during the short-term construction period would represent a negligible amount compared to the amount of fuel used daily for operation of Fort Monroe.

5.1.2 No Action

Selection of the no action alternative would result in little if any change in the commitment of irreversible or irretrievable resources at Fort Monroe, as the heating and cooling system in the hotel is not turned on.

6.0 MITIGATION MEASURES

6.1 Air-Quality

Construction activities may generate nuisance dust consisting of suspended particulate matter. To control dust emissions, water trucks and water from the fire protection system may be used to suppress dust generation from construction activities and from haul roads close to the site. During construction, there will be an increase in truck traffic. Traffic management will route truck and equipment traffic through the shortest and/ or less congested roads within Fort Monroe. When practical, the delivery of heavy equipment will be planned during non-peak traffic congestion hours.

Several precautions could be taken to prevent fugitive dust emissions during construction activity. Such precautions include, but are not limited to, using water to control dust during building construction, road grading, and land clearing; covering open equipment used to convey materials likely to create air pollution; and promptly removing spilled or tracked dirt from streets (Virginia State Air Pollution Control Board, 1985).

To mitigate impacts on air quality during construction, the construction contractor will:

- Restrict the use and application of cutback asphalt or impervious surfaces during the months of April through October (State Rule 4-39);
- Moisten disturbed earth, cover truckloads of potentially dusty materials, and wash down public roads used by the equipment during construction
- Cover truck beds during construction and hauling;
- Cover, water, or spray non-VOC chemicals on excavation piles to suppress fugitive dust emissions;
- Wash down construction equipment vehicles to minimize the creation of fugitive dust;
- Perform periodic street sweeping; and if possible, wet down paved surfaces near the site (State Rule 5-1).

6.2 Noise

Noise control efforts are recommended to minimize generation of noise coming from construction sites. In general, controls on the source are the most effective form of

construction noise controls (Thalheimer, 2000). Some examples of noise control measures include:

- Time Constraints and Scheduling – Limiting the hours of construction activities and specifically the use of heavy and noise equipment
- Equipment Restrictions – Limiting the quantity and types of equipment used during construction
- Emission Restrictions – Strictly limiting the noise generated from the site
- Substitute Methods – Using quieter equipment and procedures when possible
- Mufflers – Ensuring the equipment has quality mufflers installed
- Maintenance – Keeping the equipment well maintained
- Reduced Power Operations – Using only necessary equipment size and power settings
- Limited On-Site Equipment – Keeping only necessary equipment on site
- Noise Barriers and Noise Curtains – Temporary or semi-permanent noise barriers
- Enclosures – Enclosing stationary noise sources such as generators or air compressors
- Increased Distance – performing non-location-specific noisy activities farther away from receptors.

7.0 REFERENCES

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8.0 AGENCIES AND PERSONS CONSULTED AND/OR PROVIDED COPIES

The following agencies and persons were consulted and/or provided copies. Responses from these agencies and persons have been considered and any additional pertinent information obtained has been incorporated into the text of this document.

Chesapeake Bay Local Assistance Department

Brad Belo, Environmental Engineer, (804) 371-7500
Kelley Ramsey, Environmental Engineer, (804) 692-0429

Fort Monroe

Jennifer Guerrero, Environmental Chief, DPW/L (757) 788-5363
Ron Pinkoski, Environmental Engineer, DPW/L (757) 788-5367
Pam Schenian, Archeologist, J.M. Waller Associates, DPW/L (757) 788-5365
Peter VanDyke, Environmental Scientist, DPW/L (757) 788-2444
Grady Wesson, Environmental Protection Specialist, DPW/L (757) 788-5364

City of Hampton

Hampton Roads Planning District Commission

Virginia Department of Conservation and Recreation

Virginia Department Of Environmental Quality

Virginia Department of Game and Inland Fisheries

Virginia Department of Historic Resources

9.0 LIST OF PREPARERS

Name	Experience	Role
John Glass REMSA, Inc.	M.S., M.A., B.A., 15 year of NEPA, Natural resources, and installation and environmental management	Corporate Liaison, QA/QC
Sandra Brinson Integrity Environmental, Inc. Consultant to REMSA	B.S., 17 years of natural resources management, NEPA and RCRA/CERCLA	Project Manager and Document Production
Timothy Lavallee, P.E. LPES, Inc. Environmental Consultants	M.S., B.S., 10 years of environmental experience	Air and Noise
Will Parks REMSA, Inc.	B.S., 4 years of natural resources management	GIS/Graphics Production
Beth Hedgepeth	B.S., 7 years of natural resources experience	Natural Resources
Jennifer Guerrero Fort Monroe	B.S., 18 years of environmental experience	DPW/L Environmental Chief Technical Review

APPENDIX A

General Conformity – Record of Non-Applicability

General Conformity – Record of Non-Applicability

Date Prepared: March 23, 2004

Project Name: Chamberlin Hotel Rehabilitation Project at Fort Monroe, Virginia

Project Description: No-Action Alternative

General Conformity under the Clean Air Act, Section 176 has been evaluated for the no action alternative to the project described above according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this alternative because:

> There are no direct or indirect emissions from the no-action alternative to the project. Therefore, VOC and NOx emission are below the conformity threshold values established at 40 CFR 93.153 (b) of 100 tons VOCs and 100 tons NOx and are not regionally significant.

Supported documentation and emission estimates:

( ) Are Attached

( ) Appear in the NEPA Documentation

(X) Other (Not Necessary)

Signature: _____

Printed Name: _____

Title: _____

Organization: _____

General Conformity – Record of Non-Applicability

Date Prepared: March 23, 2004

Project Name: Chamberlin Hotel Rehabilitation Project at Fort Monroe, Virginia

Project Description: Proposed Action – The proposed action includes renovation of the Chamberlin Hotel to convert it to a military retirement community, with an assisted living facility and parking deck. It would have approximately 140 units ranging in size from 800 to 1,500 sq. ft. The existing 165 space parking area would become a parking deck, with a capacity of 300 to 500 parking spaces. On top of the parking deck, a 50,000 sq. ft. assisted living facility, with approximately 60 units would be constructed.

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this project because:

> Total direct and indirect emissions from this project have been estimated at 0.21 tons VOCs and 0.56 tons NOx per year, which are below the conformity threshold values established at 40 CFR 93.153 (b) of 100 tons VOCs and 100 tons NOx and are not regionally significant.

Supported documentation and emission estimates:

(X) Are Attached

( ) Appear in the NEPA Documentation

( ) Other

Signature: _____

Printed Name: _____

Title: _____

Organization: _____

Calculations Supporting a Record of Non-Applicability (RONA)
Chamberlin Hotel Rehabilitation Project at Fort Monroe, Virginia – Proposed Action

Equipment Type	Number of Units	Fuel Type	Horsepower	Load Factor	Per Unit Usage [Hours/day]	Annual Number of Days Used	Annual Usage [Hours]]	VOC [g/hp/hr]	NOx [g/hp/hr]	VOC [g]	NOx [g]
Air Compressor*	1	Diesel	NA	48%	6	30	180	0.70	10.73	60	927
Ariel Lift*	1	Diesel	NA	46%	4	90	360	1.57	14.00	260	2,318
Cement and Mortar Mixer	2	Diesel	11	56%	2	120	480	1.01	11.01	2,986	32,554
Crane*	1	Diesel	NA	43%	6	90	540	1.26	10.30	293	2,392
Excavator*	1	Diesel	NA	57%	6	60	360	0.70	10.73	144	2,202
Generator Sets <50 hp*	1	Diesel	NA	74%	8	240	1,920	0.70	10.73	995	15,245
Grader*	1	Diesel	NA	61%	8	21	168	1.54	9.60	158	984
Leaf Blowers/Vacuums	1	Gasoline	2	50%	14	2	28	40.74	0.81	1,141	23
Other General Industrial Equipment*	1	Diesel	NA	51%	4	240	960	1.57	14.00	769	6,854
Other Lawn and Garden Equipment	1	Diesel	3	50%	2	14	28	1.20	8.00	50	336
Plate Compactor	1	Diesel	14	43%	4	30	120	0.80	9.30	578	6,718
Pressure Washers	1	Gasoline	8	30%	8	14	112	19.930	0.81	5,357	218
Roller	1	Diesel	45	56%	8	21	168	0.80	9.30	3,387	39,372
Tractor/Backhoe*	2	Diesel	NA	59%	6	120	1,440	1.40	10.10	1,189	8,581
Trenchers*	1	Diesel	NA	75%	6	90	540	1.54	10.20	624	4,131
Welders	1	Gasoline	19	51%	120	2	240	19.93	0.81	46,349	1,884
	Number of Units	**Trips/Day**	**Per Unit Usage [Hours/day]**	**Mile/Trip**	**Annual Number of Days Used**	**Annual Usage [Hours]**	**Total Miles Driven**	**VOC [g/mile]**	**NOx [g/mile]**		
Pick-up Trucks (heavy duty)	5	NA	1.5	NA	240	1800	63,000	1.43	3.99	89,964	251,181
Dump Trucks (heavy duty)	2	NA	4	NA	60	480	16,800	2.10	8.13	35,280	136,584
									Total Grams	189,584	512,505
									Total Pounds	417	1,128
									Total Tons	**0.21**	**0.56**

Note: All emission factors and calculations based on EPA Nonroad Engine and Vehicle

APPENDIX B

Regulator Correspondence

Sandra J.Y. Brinson
206 North Avenue
Newport News, Virginia 23601

April 2, 2004

Ms. Kelley Ramsey, P.E.
Chesapeake Bay Local Assistance Department
101 N. 14th Street, 17th Floor
Richmond, Virginia 23219

Re: Chamberlin Hotel Improvement Project

Dear Ms. Ramsey:

Thank you for taking the time to speak with me over the phone today regarding the Chamberlin Improvement Project. On behalf of Drucker and Falk, LLC and REMSA, Inc. I would like to provide the following information regarding the proposed project.

The Chamberlin Hotel is located at Fort Monroe within the City limits of the City of Hampton, Virginia. The site is approximately 5 acres in size, located with this area is an asphalt parking lot, hotel with outdoor amenities, and landscaped areas around the hotel.

Drucker and Falk proposes to purchase the hotel and renovate it, and build an additional structure and parking deck. The hotel would become a military retirement community, and the new structure would be an assisted living facility. The parking deck would allow additional parking spaces in the same area as the existing parking lot.

Based on present designs, the Chamberlin Improvement Project will not increase the impervious area of the site. However, if plans should change, increasing the impervious area, you will be notified immediately. It is my understanding that if impervious area were to increase by 5,000 to 10,000 sq. ft. that mitigation would be required by planting vegetative buffers in the RPA.

An Environmental Assessment is presently being completed for this project; this letter is an effort to provide early coordination with the CBLAD. Once thanks again for taking the time to discuss this very important project with me. If you have any questions or comments, please feel free to call me at (757) 596-4109, or e-mail me at integrityenv@cavtel.net.

Sincerely,

Sandra J.Y. Brinson

Enclosed map

Sandra J.Y. Brinson
206 North Avenue
Newport News, Virginia 23601

March 23, 2004

Ms. Karen Mayne
U.S. Fish and Wildlife Service
6669 Short Lane
Gloucester, Virginia 23061-4410

Dear Ms. Karen Mayne:

On behalf of Drucker and Falk, LLC and REMSA, Inc. I am requesting a review of any federally listed species located in the area of the Chamberlin Hotel at Fort Monroe. Fort Monroe is located within the City of Hampton, Virginia. The site is approximately 5 acres in size, located with this area is an asphalt parking lot, hotel with outdoor amenities, and landscaped areas.

Drucker and Falk proposes to purchase the hotel, renovate it, and build an additional structure and parking deck. The hotel would become a military retirement community, and the new structure would be an assisted living facility. The parking deck would allow additional parking spaces in the same area as the existing parking lot. An Environmental Assessment is presently being completed for this project, this letter is an effort to provide early coordination with your agency.

If you have any questions or comments, please feel free to call me at (757) 596-4109, or e-mail me at brinson007@earthlink.net. Thank you for your help on this very important project.

Sincerely,

Sandra J.Y. Brinson

Enclosed maps

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
6669 Short Lane
Gloucester, VA 23061

April 13, 2004

Ms. Sandra J.Y. Brinson
206 North Avenue
Newport News, Virginia 23601

Re: Project #3332

Greetings:

The U.S. Fish and Wildlife Service (Service) has received your request to review the attached project for potential impacts to federally listed or proposed endangered and threatened species and designated critical habitat in Virginia pursuant to the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Attached is a list of species with Federal status and species of concern that have been documented or may occur in the county where your project is located. This list was prepared by this office and is based on information obtained from previous surveys for rare and endangered species.

In order to ensure coordination with the State agencies, we consistently recommend that individuals contact the Virginia Department of Conservation and Recreation, Division of Natural Heritage **and** the Virginia Department of Game and Inland Fisheries, since each agency maintains a different database and has differing expertise and/or regulatory responsibility. You can contact these agencies at the following addresses:

Virginia Department of Game and Inland Fisheries
Environmental Services Section
P.O. Box 11104
Richmond, VA 23230
(804) 367-1000

Virginia Department of Conservation and Recreation
Division of Natural Heritage
217 Governor Street, 2nd Floor
Richmond, VA 23219
(804) 786-7951

If either of these agencies determines that your project may impact a federally listed, proposed, or candidate species OR federally designated critical habitat, please contact this office and provide a copy of the response letter from each agency and the above referenced project number; otherwise, further contact with this office is not necessary.

If you have any questions or need further assistance, please contact Ms. Jolie Harrison at (804) 693-6694, extension 208.

Sincerely,

Karen L. Mayne

Karen L. Mayne
Supervisor
Virginia Field Office

Enclosures

CITY OF HAMPTON, VIRGINIA
Federally Listed, Proposed, and Candidate Species

SCIENTIFIC NAME	COMMON NAME	STATUS
BIRDS		
Charadrius melodus	Piping plover	LT
Haliaeetus leucocephalus	Bald eagle	LT
INVERTEBRATES		
Cicindela dorsalis dorsalis	Northeastern beach tiger beetle	LT

Species of Concern

VASCULAR PLANTS		
Trillium pusillum var. virginianum	Virginia least trillium	G3T2

May 29, 2001
Prepared by U.S. Fish and Wildlife Service, Virginia Field Office

COMMONWEALTH of VIRGINIA

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Department of Game and Inland Fisheries

William L. Woodfin, Jr.
Director

April 12, 2004

Sandra J.Y. Brinson
206 North Avenue
Newport News, Virginia 23601

RE: ESSLOG #19463, Chamberlin Hotel

Dear Ms. Brinson:

This letter is in response to your request for information related to the presence of threatened or endangered species in the vicinity of the above referenced project.

The *federal and state threatened* loggerhead sea turtle (*Caretta caretta*) and piping plover (*Charadrius melodus*) have been documented in the project area. The applicant should coordinate with Don Schwab, VDGIF Region 1 non-game biologist, in our Williamsburg office at (757) 253-4180 and the U.S. Fish and Wildlife Service regarding potential impacts to the turtle. The applicant should also coordinate with Jeff Cooper, VDGIF non-game avian biologist in our Fredericksburg office at (540) 899-4169 and the U.S. Fish and Wildlife Service regarding potential impacts to the plover.

In addition, the *state threatened* peregrine falcon (*Falco peregrinus*) and gull-billed tern (*Sterna nilotica*) have been documented in the project area. The applicant should coordinate with Jeff Cooper (above) regarding potential impacts to these species.

The project is also near two documented waterbird colonies. One (CWB ID 135) contains yellow-crowned night-herons (*Nyctanassa violacea*), common terns (*Sterna hirundo*), and black skimmers (*Rynchops niger*). The other (CWB ID 228) contains the *state threatened* gull-billed tern, common tern, and black skimmer. The applicant should coordinate with Jeff Cooper (above) and the U.S. Fish and Wildlife Service regarding impacts to these species.

Finally, the James River has been designated a Confirmed Anadromous Fish Use Area due to the documented occurrence of the following species: alewife (*Alosa pseudoharengus*), blueback herring (*A. aestivalis*), American shad (*A. sapidissima*), hickory shad (*A. mediocris*), striped bass (*Morone saxatilis*), and yellow perch (*Perca flavescens*). The applicant should coordinate with Mitchell Norman, VDGIF Region 1 Fisheries Manager in our Chesapeake office at (757) 465-6811, regarding potential impacts to this resource.

4010 WEST BROAD STREET, P.O. BOX 11104, RICHMOND, VA 23230-1104
(804) 367-1000 (V/TDD) *Equal Opportunity Employment, Programs and Facilities* FAX (804) 367-9147

Information about fish and wildlife species was generated from our agency's computerized Fish and Wildlife Information System, which describes animals that are known or may occur in a particular geographic area. Field surveys may be necessary to determine the presence or absence of some of these species on or near the proposed area. Also, additional sensitive animal species may be present, but their presence has not been documented in our information system.

Endangered plants and insects are under the jurisdiction of the Virginia Department of Agriculture and Consumer Services, Bureau of Plant Protection. Questions concerning sensitive plant and insect species occurring at the project site should be directed to Keith Tignor at (804) 786-3515.

There is a processing charge of $25.00 for our response. Please remit a check, made payable to **TREASURER OF VIRGINIA**, within 30 days. To insure proper credit to your account, please address your payment envelope directly to MaryBeth Murr at the address listed in the letterhead.

This letter summarizes the likelihood of the occurrence of endangered or threatened animal species at the project site. If you have additional questions in this regard, contact me at (804) 367-8001.

Please note that the data used to develop this response are continually updated. Therefore, if significant changes are made to your project or if the project has not begun within 6 months of receiving this letter, then the applicant should request a new review of our data.

The Fish and Wildlife Information Service, the system of databases used to provide the information in this letter, can now be accessed via the Internet! The Service currently provides access to current and comprehensive information about all of Virginia's fish and wildlife resources, including those listed as threatened, endangered, or special concern; colonial birds; waterfowl; trout streams; and all wildlife. Users can choose a geographic location and generate a report of species known or likely to occur around that point. From our main web page, at www.dgif.state.va.us, choose the hyperlinks to "Wildlife" then "Wildlife Information and Mapping Services", and then "Wildlife Information Online Service". For more information about the service, please contact Amy Martin, Online Service Coordinator, at (804) 367-2211.

Sincerely,

W. Adam Phelps
Wildlife Biologist

cc: R.T. Fernald, Don Schwab, Jeff Cooper, Mitchell Norman, VDGIF
Kim Marbain, USFWS

DEPARTMENT OF THE ARMY
HEADQUARTERS FORT MONROE
102 MCNAIR DRIVE
FORT MONROE, VIRGINIA 23651-1047
April 9, 2004

REPLY TO
ATTENTION OF

Environmental Division

Ms. Kathleen Kilpatrick
State Historic Preservation Officer
Department of Historic Resources
2801 Kensington Avenue
Richmond, Virginia 23221

Dear Ms. Kilpatrick:

Drucker and Falk, private developers, are proposing to purchase the Chamberlin Hotel to rehabilitate it for use as a military retirement apartment building. The hotel is privately owned, but located on federal property under a ground-lease (Encl 1). The developers are proposing to expand the hotel to add a parking garage and an assisted living wing. We are of the understanding that the project will not proceed without historic preservation tax credits. This ensures that the rehabilitation will be in accordance with the Secretary of the Interior's Standards for Rehabilitation. In addition, the proposed modifications to the building exterior and the new addition must conform to Fort Monroe's installation design guidelines in order to receive final Army approval to proceed.

Fort Monroe is writing to provide documentation that we are aware of the project and that the Army concurs with the concept. We also are aware that the developer is preparing the environmental documentation and coordinating with state agencies. Correspondence from Fort Monroe should be assigned to the same DHR file as the correspondence from Mrs. Sandra Brinson, REMSA, consultant to Drucker and Falk.

We also want to provide information about the potential for archaeological resources in the affected

area. The ground-lease lot was not investigated during the "Phase I Archeological Investigations at Fort Monroe and Old Point Comfort (44HT27), Hampton, Virginia" (DHR File #96-0873-F). This was due to the conditions of the land-lease and the fact that most of the area is paved or is developed with the hotel and its amenities--swimming pool, tennis courts, sidewalks, brick patios, utilities, and so forth. The positive shovel tests in the block across Fenwick Avenue from the hotel had materials in disturbed fill contexts (Encl 2). The recent replacement of a below ground storage tank behind Building 133 revealed fill deposits to a depth of at least 8 feet. The excavation for streetlights along the seawall in Continental Park revealed fill deposits to a depth of at least four feet.

The land on which the Chamberlin Hotel is located was formed by accretion between the 1830s and 1860s (Encl 3). The land then was further built up by fill episodes. The first Chamberlin is shown on an 1896 map and in a 1918 aerial photograph (Encls 4 and 5). The first Chamberlin burned in 1920 (Encls 6 and 7). A building south of the Chamberlin either remained standing into the 1950s or was replaced with another building, which appears in the upper corner of a ca. 1950 aerial photograph (Encl 8). It was razed before 1957, when another aerial photograph was taken of the post.

It is likely that the construction of the massive first Chamberlin Hotel disturbed any archaeological evidence or the pre-1896 buildings from the period 1838 to 1896 (Encls 9 and 10). Excavation of the basement and swimming pools of the second Chamberlin Hotel probably disturbed evidence of a large portion of the footprint of the first Chamberlin. However, the intense fire that destroyed the first Chamberlin would have consumed many materials normally found in historic archaeological sites or turned them into uninformative melted or charred material.

We believe the only potential for archaeological deposits is as deeply buried sites. As shown on Enclosure 1, this area of post was expanded between the burning of the first Chamberlin and the Construction of the second. Drucker and Falk sponsored a preliminary geotechnical engineering study of the area proposed for

the addition of the new parking garage and assisted living facility (Encl 11). On pages 6 and 8 of the study, it is stated concrete and creosote-treated wood were encountered in Boring B-2. The creosote-treated wood was 9 to 12 feet below the current ground surface, according to the boring log for B-2. We believe the structure encountered is part of the seawall that was installed when the first Chamberlin was built. If the top of the seawall is nine feet below the ground surface, this suggests that nine feet of fill exists across this project lot, to bury the rubble from the ruins of the burnt Chamberlin. The recent replacement of an underground storage tank behind Building 133, across Fenwick Road from the Chamberlin, revealed fill deposits to a depth of at least 8 feet.

If you need any additional information, please contact Pamela Schenian at (757) 788-5365.

Sincerely,

Craig L. Simoneau
Lieutenant Colonel, U.S. Army
Director, Public Works and Logistics

Enclosures

Cc: Mrs. Sandra Brinson, REMSA
Mr. Robert S. Mills, Commonwealth Architects
Mr. Robert C. Lippard, Drucker and Falk

COMMONWEALTH of VIRGINIA

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July 15, 2004

Lt. Col. Craig L. Simoneau
Director, Public Works and Logistics
Headquarters, Fort Monroe
102 McNair Drive
Fort Monroe, Virginia 23651

RE: Draft Environmental Assessment and Federal Consistency Determination, Chamberlin Hotel Rehabilitation Project, Fort Monroe, Virginia
DEQ-04-101F

Dear Colonel Simoneau:

The Commonwealth of Virginia has completed its review of the above documents. The Department of Environmental Quality is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. The Department is also responsible for coordinating the review of federal consistency determinations submitted by federal agencies pursuant to the Coastal Zone Management Act. The following agencies, planning district commission, and locality joined in this review:

Department of Environmental Quality (hereinafter "DEQ")
Department of Game and Inland Fisheries
Department of Conservation and Recreation
Department of Historic Resources
Hampton Roads Planning District Commission
City of Hampton.

Project Description

According to the Draft Environmental Assessment ("Draft EA"), the Army proposes to lease approximately 5 acres of land on Fort Monroe, which includes the Chamberlin Hotel, to private interests, which will convert the Hotel to an assisted living complex for retired military officers. The project involves conversion of the hotel to approximately 160 individual apartments for rent, construction of a parking deck for 300 to 350 cars on the existing parking lot (which has 165 spaces), and construction of an

assisted living facility with 60 units on top of the parking deck. New landscaping would be part of the project (Draft EA, page 1-1, section 1.1). The footprint of the existing impervious area would not be increased (federal consistency determination, page 4, "Coastal Lands Management" heading). The parking deck would have two levels above grade and one at grade, and be open on all sides (Draft EA, page 2-2, section 2.3).

One company owns the hotel and has contracted to sell it to another, which will develop it as a retirement community for retired military officers and provide parking areas used by active military personnel at Fort Monroe (Draft EA, pages 1-4 and 1-5, section 1.3). The decision on the project rests with the developing company and the Garrison Commander at Fort Monroe (Draft EA, page 1-5, section 1.4). References to these parties hereinafter will be to "the developer" and "the Army," respectively.

Environmental Impacts and Mitigation

1. Natural Heritage Resources. The Department of Conservation and Recreation (DCR) has searched its Biotics Data System for occurrences of natural heritage resources in the project area map (Draft EA, page 1-3). "Natural heritage resources" are defined as the habitat of rare, threatened, or endangered animal and plant species, unique or exemplary natural communities, significant geologic formations, and other features of scientific interest. The Department of Conservation and Recreation ("DCR") indicates that natural heritage resources are documented as present in the project vicinity. However, due to the scope of the project activity and the distance to the resources, DCR does not anticipate that this project will adversely impact these natural heritage resources.

Under a Memorandum of Agreement established between DCR and the Virginia Department of Agriculture and Consumer Services (VDACS), DCR has the authority to report for VDACS on state-listed plant and insect species. The proposed activity will not affect any documented state-listed plant and insect species, according to DCR.

Because new and updated information is continually added to the Biotics Data system, the Army and/or the developer should contact DCR for an update of the above information if a significant amount of time passes before the information is used.

2. Air Quality. According to DEQ's Division of Air Program Coordination (hereinafter "Air Division"), and as the Draft EA indicates (page 3-5, section 3.2.3), Fort Monroe is in an ozone (O_3) non-attainment area (Ellis/Narasimhan, 7/15/04) and an emission control area for volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), both of which are contributors to ozone pollution. Accordingly, the Army and/or the developer must restrict emissions of volatile organic compounds and oxides of nitrogen during implementation of this project.

During construction, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following (see also Draft EA, page 4-2, section 4.2.1):

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

In addition, if project activities include the burning of construction or demolition material, this activity must meet the requirements under 9 VAC 5-40-5600 et seq., for open burning, and it may require a permit (see "Regulatory and Coordination Needs," item 1, below). The Regulations provide for, but do not require, the local adoption of a model ordinance concerning open burning. The developer should contact Hampton city officials to determine what local requirements, if any, exist. The model ordinance includes, but is not limited to, the following provisions:

- All reasonable effort shall be made to minimize the amount of material burned, with the number and size of the debris piles;
- The material to be burned shall consist of brush, stumps and similar debris waste and clean-burning demolition material;
- The burning shall be at least 500 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted;
- The burning shall be conducted at the greatest distance practicable from highways and air fields;
- The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced;
- The burning shall not be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials; and
- The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area.

3. Water Quality. DEQ's Division of Water Quality states that, based on the information presented in the Draft EA, there are no surface waters or wetlands located on the project site. The City of Newport News provides water utility services to Fort Monroe; accordingly, no water withdrawals or groundwater well installations will be necessary. Therefore, DEQ's Division of Water Quality concurs with the conclusion of

the Draft EA that the project will not adversely affect water resources (page 4-10, section 4.4.1).

The project does not appear likely to directly affect either surface waters or wetlands, according to DEQ's Tidewater Regional Office. Accordingly, the project will not require a Virginia Water Protection Permit. However, it will require a Virginia Pollutant Discharge Elimination System (VPDES) Stormwater General Permit for Construction Activities because the land disturbance is likely to be about five acres. See "Regulatory and Coordination Needs," item 2, below.

DEQ recommends strict adherence to erosion and sediment control practices and stormwater requirements (see item 7, below), along with monitoring to ensure that these practices are effectively preventing sediment and pollutants from entering surface waters or wetlands.

4. Solid and Hazardous Waste Management. The Draft EA addressed both hazardous and solid wastes to some extent, according to DEQ's Waste Division. However, the Draft EA did not include a search of waste-related data bases. DEQ's Waste Division performed a cursory review of its data files and found Fort Monroe to be listed as a federal facility (VA7213720603) which is also:

- a Formerly Used Defense Site (VA9799F1583), and
- a RCRA large-quantity generator of hazardous waste (VA5210020603).

The following web sites may be helpful to the Army and/or the developer in locating additional information relating to the above identification numbers:

- http://www.epa.gov/echo/search_by_permit.html and
- http://www.epa.gov/enviro/html.rcris_query_java.html.

The Draft EA indicated that unexploded ordnance may be encountered on the property surrounding the hotel (page 3-24, section 3.11.1), but that, as DEQ's Waste Division noted, there are no Installation Restoration Program (IRP) sites in the vicinity of the project site (page 3-24, section 3.11.2). See "Regulatory and Coordination Needs," item 3, below.

All solid wastes attributable to construction and demolition should be characterized prior to their disposal, according to DEQ's Tidewater Regional Office.

DEQ encourages the Army and the developer to implement pollution prevention principles. This means reducing waste at the source, re-using materials, and recycling waste materials to the greatest extent practicable. See also item 10, below.

5. Underground and Above-Ground Storage Tanks. Fort Monroe (CEDS #5016460) operates five underground storage tanks (USTs) and 13 above-ground storage tanks (ASTs). All are used for storage of petroleum products including gasoline, diesel fuel, and heating oil. Any closure or temporary change in the status of these tanks as a result of this project must be reported to DEQ's Tidewater Regional Office. Similarly, any installation of new "regulated" USTs or ASTs associated with the project must be coordinated with that Office (see "Regulatory and Coordination Needs," item 4, below).

There have been 14 petroleum releases reported at Fort Monroe. All these cases have been closed. One such case was at the Chamberlin Hotel (PC 1992-1165), specifically the Chamberlin Hotel Garage, Building 207. For this reason, see the guidance on contaminated soils in "Regulatory and Coordination Needs," item 3, below

6. Historic Structures and Archaeological Resources. According to the Department of Historic Resources, the Chamberlin Hotel and the project site adjacent to it are both located within the boundary of the Fort Monroe Historic District, a National Historic Landmark listed in the National Register of Historic Places. In addition, the hotel itself is listed in the National Register and also the Virginia Landmarks Register. Accordingly, any proposed rehabilitation and new construction must conform to the guidance in the *Secretary of the Interior's Standards for Rehabilitation*.

This project will require consultation with the Department of Historic Resources pursuant to section 106 of the National Historic Preservation Act, because of the location of the Hotel on land owned by the Army. See "Regulatory and Coordination Needs," item 5, below.

7. Erosion and Sediment Control; Stormwater Management. Federal agencies and their authorized agents conducting regulated land-disturbing activities on public and private lands in the Commonwealth of Virginia must comply with the Virginia Erosion and Sediment Control Law, the Virginia Stormwater Management Law, and other applicable federal non-point source pollution control mandates such as section 313 of the Clean Water Act and the federal consistency requirements of the Coastal Zone Management Act. Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, or other structures, soil/dredge spoil areas, or related land conversion activities that disturb 10,000 square feet or more (2,500 square feet or more in Chesapeake Bay Preservation Areas; see next item) are regulated by the Erosion and Sediment Control Law and its implementing regulations. Similar activities that disturb one acre or more are regulated by the Stormwater Management Law and its

implementing regulations. Accordingly, the Army and/or the developer should prepare and implement Erosion and Sediment Control Plans and Stormwater Management Plans that comply with state law. The Army is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliance, and/or other mechanisms consistent with Army policy.

8. Chesapeake Bay Preservation Areas. The Draft EA does not describe how the performance criteria of the Chesapeake Bay Preservation Area Designation and Management Regulations will be met. The federal consistency determination states that the footprint of existing impervious areas on the site will not be increased (page 4, "Coastal Lands Management" heading). However, according to the Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance, it is difficult to ascertain from the maps in the Draft EA whether the project is located in an area that would make it subject to the Regulations in the first place. The Regulations are one of the Enforceable Policies of the Virginia Coastal Resources Management Program (see "Federal Consistency under the Coastal Zone Management Act," item 1, below). Implementation of the Regulations in Hampton means that only water-dependent and specifically exempted activities within a 100-foot buffer along sensitive resource areas such as tidal shores, tidal wetlands, and non-tidal wetlands along perennial streams and tidal wetlands. Other, less restrictive performance criteria apply to development within an additional 100-foot area adjacent to and landward of the more sensitive aforementioned areas. One of the key criteria for development in these areas is the requirement to treat stormwater runoff. The Draft EA indicates that under Fort Monroe's existing VPDES permit, stormwater on the Chamberlin Hotel site is simply collected and discharged directly into the waters of Hampton Roads (Draft EA, page 3-14, section 3.4.6).

To accord with the Regulations, if the proposed activities encroach into any of the types of areas described above, the Army and/or the developer must treat stormwater first, before it is discharged. This may require retrofitting of the current stormwater system. To determine the level of treatment and the type and size of Best Management Practice needed, the Army and/or the developer should follow the procedures in Appendix 5D of the Virginia Stormwater Management Handbook. See "Regulatory and Coordination Needs," item 6, below.

9. Wildlife Resources. The Department of Game and Inland Fisheries, as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects. The Department (hereinafter "DGIF") is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 et seq.), and provides environmental analysis of projects or permit applications coordinated through the Department of Environmental

Quality and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts.

DGIF records indicate two documented waterbird colonies close to the project site. The following species have been documented:

- yellow-crowned night heron
- common tern
- black skimmer
- gull-billed tern (a state-listed threatened species).

These species are most vulnerable to disturbance during the critical nesting period of April 1 through August 30 of each year. However, the Department of Game and Inland Fisheries does not anticipate that the project would have a significant adverse impact on these nesting waterbirds because of the current level of disturbance and development at and around the project site.

10. Pollution Prevention. DEQ advocates that principles of pollution prevention be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site Best Management Practices (BMPs) will help to ensure that environmental impacts are minimized. However, pollution prevention techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source. We have several pollution prevention recommendations that may be helpful in carrying out this project:

- Consider development of an Environmental Management System (EMS). An effective EMS will ensure that the facility is committed to minimizing its environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program.
- Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts. Consider contractors' commitments to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for infrastructure and building construction and design. These could include asphalt and concrete containing

recycled materials, and integrated pest management in landscaping, among other things.

- Integrate pollution prevention techniques into facility maintenance and operation, to include the following: inventory control (record-keeping and centralized storage for hazardous materials), product substitution (use of non-toxic cleaners), and source reduction (fixing leaks, energy-efficient HVAC and equipment). Maintenance facilities should be designed with sufficient and suitable space to allow for effective inventory control and preventive maintenance.

DEQ's Office of Pollution Prevention provides free information and technical assistance relating to pollution prevention techniques and EMS. If interested, the Army and/or the developer may contact that Office (Tom Griffin, telephone (804) 698-4545).

11. Local and Regional Comments. The Hampton Roads Planning District Commission, following its consultation with the City of Hampton, indicates that the proposed project is consistent with local and regional plans and policies.

Federal Consistency under the Coastal Zone Management Act

Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities located inside or outside of Virginia's designated coastal management area that can have reasonably foreseeable effects on coastal resources or coastal uses must, to the maximum extent practicable, be implemented in a manner consistent with the Virginia Coastal Resources Management Program (VCP). The VCP consists of a network of programs administered by several agencies. The DEQ coordinates the review of federal consistency determinations with agencies administering the Enforceable and Advisory Policies of the VCP. Based on the information submitted and the comments of reviewing agencies, we concur that the proposed activity is consistent with the Virginia Coastal Resources Management Program, provided that the Army and the developer comply with all applicable requirements.

Public notice of this review was posted on DEQ's web site from June 16, 2004 through June 28, 2004. No comments were received.

On the basis of the Draft EA, the federal consistency determination, and the discussions above ("Environmental Impacts and Mitigation,"), the following Enforceable Policies do not apply to this project:

Shoreline Sanitation
Fisheries Management, including the State Tributyltin Regulatory Program
Dunes Management

Subaqueous Lands Management
Wetlands Management
Point Source Pollution Control.

The following Enforceable Policies will, or may, apply to this project:

1. Non-point Source Pollution Control. See the erosion control discussion in "Environmental Impacts and Mitigation," item 7, above.

2. Air Pollution Control. See "Environmental Impacts and Mitigation," item 2, above.

3. Coastal Lands Management. See "Environmental Impacts and Mitigation," item 8, above.

We encourage the Army and the developer to consider the Advisory Policies of the Virginia Coastal Resources Management Program (first enclosure) in planning and carrying out this project.

Regulatory and Coordination Needs

1. Air Quality Regulation. The renovated hotel may require new fuel-burning heating facilities, and the construction project may involve fuel-burning machinery; these items may require new source review or operating permits from DEQ. Questions on these permitting requirements, as well as the potential need for an open burning permit (see "Environmental Impacts and Mitigation," item 2, above), should be addressed to DEQ's Tidewater Regional Office (Jane Workman, Air Permits Manager, telephone (757) 518-2112).

2. Water Quality Regulation. The Army and/or the developer must apply to DEQ's Tidewater Regional Office (Jim McConathy, telephone (757) 518-2165) for coverage under the VPDES Stormwater General Permit for Construction Activities (see "Environmental Impacts and Mitigation," item 3, above). In addition, activities associated with this construction project must comply with the Phase II Municipal Separate Storm Sewer System Permit held by Fort Monroe. That permit includes provisions addressing control of storm water associated with construction and post-construction activities.

3. Solid and Hazardous Waste Management. As indicated above ("Environmental Impacts and Mitigation," item 4), there may be unexploded ordnance on the property surrounding the hotel. Due to the history of military activity at the Fort, and the fact that much of the diversity in elevation (between sea level and 14 feet above it) is attributable

to fill material (Draft EA, page3-18, section 3.6), it is possible that discarded munitions and ordnance are buried at the Fort. For this reason, any ground disturbance should be preceded by procedures to eliminate unexploded ordnance as an issue. Questions on this matter may be directed to DEQ's Waste Division, Federal Facilities Program (Durwood Willis, telephone (804) 698-4192).

There was a previous petroleum release at the Chamberlin Hotel itself (see "Environmental Impacts and Mitigation," item 5, above). Any soil suspected of contamination, or wastes that are generated, must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. These include, but are not limited to, the Virginia Waste Management Act (*Virginia Code* sections 10.1-1400 et seq.), the Virginia Hazardous Waste Management Regulations (9 VAC 20-60), and the Virginia Solid Waste Management Regulations (9 VAC 20-80); see the enclosed comments of DEQ's Waste Division (DEQ memo, Brockman to Ellis, dated June 22, 2004) for additional details.

The Draft EA stated that asbestos-containing materials (ACM) and lead-based paint have been discovered previously in the hotel (page 3-24, section 3.11.1). We offer guidance on these matters in sub-items (a) and (b).

(a) Asbestos Abatement. The owner or operator of a demolition or renovation project must inspect the affected part of the facility thoroughly, prior to the commencement of the demolition or renovation, for the presence of asbestos, including Category I and Category II non-friable ACM. Upon classification as friable or non-friable, all waste ACM shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640), and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 et seq.) The Army and/or the developer may contact the DEQ Waste Management Program (telephone (804) 698-4021) and the Department of Labor and Industry (Dr. Clarence Wheeling, telephone (804) 786-0574) for additional information.

(b) Lead-Based Paint. The proposed project must comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations, and with the Virginia Lead-Based Paint Activities Rules and Regulations (9 VAC 20-60-261). For additional information regarding these requirements, the Army and/or the developer may contact the Department of Professional and Occupational Regulation (Thomas Perry, telephone (804) 367-8595).

4. Petroleum Storage Tanks. Any closure or temporary change in the status of existing USTs or ASTs (see "Environmental Impacts and Mitigation," item 5, above) must be reported to DEQ's Tidewater Regional Office (David Borton, telephone

(757) 518-2118). Similarly, any installation of new USTs or ASTs in connection with this project, must be coordinated with that Office.

5. Historic Resources Coordination. To ensure compliance with section 106 of the National Historic Preservation Act, the Army and the developer should consult with the State Historic Preservation Office, which in Virginia is the Department of Historic Resources (Marc Holma, telephone (804) 367-2323, extension 114). This consultation should precede any action that would affect the Fort Monroe Historic District or the Chamberlin Hotel itself.

6. Chesapeake Bay Preservation Areas. If the stormwater quality treatment requirements of the Chesapeake Bay Preservation Area Designation and Management Regulations apply to this project, the Army and/or the developer must contact the Department of Conservation and Recreation's Division of Chesapeake Bay Local Assistance (Catherine Harold, telephone (804) 371-7501). The *Virginia Stormwater Management Handbook* may be obtained from the Department of Conservation and Recreation; see next item.

7. Erosion and Sediment Control; Stormwater Management. If any land disturbance (see "Environmental Impacts and Mitigation," item 8, above) is anticipated as part of this project, the Army and/or the developer is encouraged to contact the Department of Conservation and Recreation's Chowan, Albemarle, and Coastal Watersheds Office (Art Kirkby, telephone (757) 925-2468) to obtain plan development or implementation assistance so as to ensure project compliance with the Erosion and Sediment Control Law (*Virginia Code* section 10.1-567) and, if necessary, the Stormwater Management Law (*Virginia Code* section 10.1-603.15).

Copies of the *Virginia Stormwater Management Handbook* may be obtained by calling the Watershed Office (above) or visiting the agency web site at http://www.dcr.state.va.us.

Thank you for the opportunity to comment on this project.

Sincerely,

Ellie L. Irons
Program Manager
Office of Environmental Impact Review

Enclosures
cc: (next page)

Lt. Col. Craig L. Simoneau
Page 12

cc: Raymond T. Fernald, DGIF
John R. Davy, DCR
Allen R. Brockman, DEQ-Waste
Durwood Willis, DEQ-Waste
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Harold J. Winer, DEQ-TRO
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